

U.S. Environmental Protection Agency

40 CFR Part 80

[FRL -- ]

**Regulation of Fuels and Fuel Additives: Modifications to  
Standards and Requirements for Reformulated and Conventional  
Gasoline**

**AGENCY:** Environmental Protection Agency (EPA)

**ACTION:** Proposed Rule

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**SUMMARY:** Through the amended Clean Air Act of 1990, Congress mandated that EPA promulgate regulations requiring that gasoline sold in certain areas be reformulated to reduce vehicle emissions of toxic and ozone-forming compounds. The EPA published rules for the certification and enforcement of reformulated gasoline (RFG) and provisions for non-reformulated or conventional gasoline on February 16, 1994.

Based on experience gained since the promulgation of these regulations, EPA is proposing a variety of changes to the regulations relating to emissions standards, emissions models, compliance related requirements and enforcement

provisions. The proposed changes involve both the reformulated and conventional gasoline programs. Many of the changes codify guidance issued by the Agency since the initial adoption of these gasoline programs. These changes are in the nature of minor adjustments to the structure of these programs. The emissions benefits achieved from reformulated gasoline will not be reduced.

**DATES:** The comment period on this proposed action will close [insert a date 30 days after publication in the Federal Register], unless a hearing is requested, in which case the comment period will close 30 days after the close of the public hearing. EPA will conduct a hearing (date and location to be announced) if a request for such is received by [insert a date 7 days after publication in the Federal Register].

**ADDRESSES:** Written comments on this proposed action should be addressed to Public Docket No. A-97-03, Waterside Mall (Room M-1500), Environmental Protection Agency, Air Docket Section, 401 M Street, S.W., Washington, D.C. 20460. The Agency requests that commenters also send a copy of any comments to Marilyn Bennett, U.S. Environmental Protection Agency, Office of Air and Radiation, at the address listed in the For Further Information Contact section. Those wishing to notify EPA of their intent to submit adverse comment or request an opportunity for a public hearing on

this action should contact Marilyn Bennett at (202) 233-9006. Materials relevant to the final rule establishing standards for reformulated gasoline and anti-dumping standards for conventional gasoline are contained in Public Dockets - A-92-01 and A-92-12, and are incorporated by reference.

The preamble, regulatory language and regulatory support document are also available electronically from the EPA Internet Web site and via dial-up modem on the Technology Transfer Network (TTN), which is an electronic bulletin board system (BBS) operated by EPA's Office of Air Quality Planning and Standards. Both services are free of charge, except for your existing cost of Internet connectivity or the cost of the phone call to TTN. Users are able to access and download files on their first call using a personal computer per the following information. The official Federal Register version is made available on the day of publication on the primary Internet sites listed below. The EPA Office of Mobile Sources also publishes these notices on the secondary Web site listed below and on the TTN BBS.

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**FOR FURTHER INFORMATION CONTACT:**

Marilyn Bennett, Fuels and Energy Division, U.S. EPA, 401 M Street, S.W. (6406J), Washington, D.C. 20460. Telephone: (202) 233-9006.

**SUPPLEMENTARY INFORMATION:**

Regulated Entities

Regulated categories and entities potentially affected by this action include:

<u>Category</u>	<u>Examples of regulated entities</u>
Industry	Refiners, importers, and distributors of motor vehicle fuel; motor vehicle fuel retail outlets and wholesale purchaser-consumer facilities; facilities that act as independent laboratories.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of

entities that EPA is now aware could be potentially regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether your entity is regulated by this action, you should carefully examine the applicability criteria of Part 80, Subparts D, E and F, of title 40 of the Code of Federal Regulations. If you have questions regarding applicability of this action to a particular entity, consult the person listed in the preceding "FOR FURTHER INFORMATION CONTACT" SECTION.

Today's preamble explains the basis for the regulatory changes and the purpose of the proposed rule. The remainder of this preamble is organized into the following sections:

- I. Corrections of Typographical Errors and Minor Revisions
- II. General Fuels Provisions
- III. RFG and Anti-dumping Standards/Models
- IV. RFG Compliance Requirements
- V. Enforcement
- VI. Anti-dumping Requirements
- VII. Attest Engagements
- VIII. Environmental and Economic Impacts
- IX. Public Participation
- X. Regulatory Flexibility
- XI. Executive Order 12866

- XII. Paperwork Reduction Act
- XIII. Unfunded Mandates Act
- XIV. Statutory Authority

**I. Corrections of Typographical Errors and Minor Revisions**

§ 80.2(w)	The reference to the cetane index test method is removed and added as § 80.3(e). As a replacement, a definition is proposed for "previously certified gasoline" to mean RFG and conventional gasoline that has been produced or imported in conformance with applicable requirements and included in the refinery, oxygenate blender or importer compliance calculations.
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§ 80.2(y)	The reference to the sulfur content test method is removed and added as § 80.3(f). This section is revised to conform to the sulfur test method in § 80.46(a).
§ 80.2(z)	The reference to the aromatics content test method is removed and added as § 80.3(g). This section is revised to limit the test method to use for diesel fuel only to avoid conflict with the test method for aromatics content of RFG in § 80.46(f).
§ 80.2(ee)	Revises the definition of reformulated gasoline to delete the requirement for a gasoline marker under § 80.82.
§ 80.2(gg)	Revises definition of gasoline "batch" to make this definition apply to conventional gasoline as well as to RFG.



§ 80.41(d)	Revises chart to replace " $\leq 32.6$ " for VOC per-gallon minimum reduction with " $\geq 32.6$ " and replace " $\leq -2.5$ " with " $\geq -2.5$ " for per-gallon minimum NOx performance reduction (percent)
§ 80.45(c)(1)(iv) (B)	Corrects several small typographical errors in both the Phase I and Phase II equations.
§ 80.45(c)(1)(iv) (D)(12)	Corrects typographical error by changing "(E300 X 72 percent)" to "(E300 - 72 percent)."
§ 80.45 (c)(1) (iv)(D) (13)	Corrects typographical error by changing Phase I coefficients to Phase II coefficients, i.e. change " $80.32 + (0.390 \times \text{ARO})$ " to " $79.75 + (0.385 \times \text{ARO})$ ."
§ 80.45 (d) (1) (iv) (B)	Corrects typographical errors to the equation.

§ 80.45 (f) (1)(i)	Corrects the entry for aromatics "acceptable range" to read "0.0 - 55.0 volume percent."
§ 80.49 (a)	Corrects typographical error. There is a reference to section 80.43(c), which is incorrect. The proper reference is to section 80.49(a)(5)(i).
§ 80.49(a)(1)	Corrects typographical error in formula at the bottom of the new parameter under Fuel 2. Changes from "C+B/2" to "(C+B)/2."
§ 80.49(a)(3)	Corrects typographical error. There is a reference to § 80.43(c), which is incorrect. The proper reference is to § 80.49(a)(5)(i).

§ 80.49(b)	Corrects typographical error.  There is a reference to § 80.43(c), which is incorrect. The proper reference is to § 80.49(a)(5)(i).
§ 80.50(a)(2)	Corrects reference to "extension fuels per the requirements of § 80.49(a)" to read "extension fuels per the requirements of § 80.49(b)."
§ 80.65(e)(2)(ii)(B)	Revises to apply to importers as well as refiners.
§ 80.65(g)	Revises to delete heading: "Marking of conventional gasoline."
§ 80.68(b)(2)(ii)	Revises the word "area" to read "area(s)" to clarify the application of the equation to a situation in which more than one area fails a survey or survey series in a single year.
§ 80.69(a)(6)(iv)	Revises to add reference to § 80.69(e)(2).

§ 80.69(e)	Revises to clarify reference by removing "who obtains any RBOB in any gasoline delivery truck" and adding "other than a terminal storage tank blender specified in § 80.69(c)".
§ 80.69(e)(2)(i)(A)	Revises to add the word "to."
§ 80.69(e)(2)(v)	Corrects reference to § 80.70(b)(2)(i). The correct reference is to § 80.65(e)(2)(i).
§ 80.75(a)	Revises to require refiners, importers, and oxygenate blenders to include notification to EPA of per-gallon versus average election with the first quarterly reports submitted each year.
§ 80.75(a)(3)	Revises to add a new § 80.75(a)(3) which provides a mathematical equation for converting weight percent oxygen from an oxygenate to volume percent oxygenate.

§ 80.77(c)	Revises to add reference to RBOB.
§ 80.77(f)	Revises to add reference to RBOB
§ 80.128(e)(2)	Revises by changing reference from §80.69(a)(9) to § 80.69(a)(2).

## II. General Fuels Provisions

### A. Test Methods [§ 80.3; RFG test methods § 80.46]

1. Replacement of lead and phosphorus test methods with industry standard test methods [§§ 80.3(a) and (b)]

40 CFR Part 80, Appendices A and B, specify the test methods that are used for determining, respectively, the phosphorus content and the lead content of gasoline.

Today's proposal would remove Appendices A and B and add §§ 80.3(a) and (b) which would require the use of ASTM method D 3231-94 for phosphorus and methods D 3237-90 or D 5059-92 for lead. The phosphorus and lead test methods are used primarily to determine compliance with the standards under §§ 80.22 and 80.23, dealing with the unleaded gasoline program. Also, under § 80.41(h)(1), RFG may contain no heavy metals. As a result, the proposed lead test method would be used for determining the presence of this heavy metal in RFG.

The test methods in Appendices A and B of 40 CFR Part

80 originally were adopted from ASTM standard test methods. Over time, however, ASTM has updated their test methods, while EPA has not. EPA believes the current ASTM test methods are equivalent to the methods currently in the regulations, and are more consistent with the test methods regulated parties normally use for commercial purposes. As a result, the proposed test methods would be appropriate for determining compliance with the provisions of 40 CFR Part 80.

EPA believes there would be little additional burden on the regulated industry if the proposed phosphorus and lead test methods were adopted. Initially, EPA understands that the proposed test methods are the current industry standard test methods, so most gasoline testing laboratories already are equipped to conduct the proposed test methods. In addition, there is no requirement for regulated parties to test their gasoline for phosphorus or lead under either the unleaded gasoline or the RFG regulations, so parties would not be obligated to use the proposed test methods at all. Rather, the phosphorus and lead test methods in the regulations are used by EPA to determine if gasoline meets standards for these metals. EPA or a regulated party also could use non-regulatory phosphorus or lead test methods. However, in an enforcement proceeding, the results from non-regulatory test methods would only constitute evidence of

the results that would have been obtained if the regulatory test method had been conducted on the gasoline at issue.

2. Reformulated Gasoline Test Methods [§§ 80.46(a) through(g)]

In § 80.46, test methods were specified for the measurement of the regulated properties of reformulated gasoline. Many of the test methods designated in the original rule were consensus standards, prepared and maintained by ASTM. Since the original issuance of the rule, some of these methods have been updated. EPA is now proposing to replace the current regulatory methods with the updated versions of these methods for the measurement of sulfur, olefins, and distillation parameters. In addition, EPA is proposing an alternative test method (ASTM D 5453-93) for determining the sulfur content in conventional gasoline until September 1, 1998. This proposed alternative test method is discussed in Section VI.B.6. The proposed updated methods all are finally approved ASTM test methods. In addition, ASTM has developed a method (ASTM D 5599-95) that is the same as the procedure for the measurement of oxygenates at §§ 80.46(g)(1) through (8), and EPA proposes to replace §§ 80.46(g)(1) through (8) with a reference to the ASTM method. For the measurement of RVP, EPA proposes to eliminate the appendix containing EPA Method 3 (Appendix E), and designate ASTM D 5191-96 as the required method,

with the exception that the correlation equation as described in EPA Method 3 must be used in place of the correlation equation described in ASTM D 5191-96. ASTM D 5191-96 is identical to the RVP test method in Appendix E when the correlation equation from EPA Method 3 is used with the ASTM method. In all cases, these changes do not amount to a deviation in method, or significant change in procedure. Most of the ASTM changes revolve around improvements in quality statements. The inclusion of ASTM D 5599-95 for oxygenates is the result of ASTM preparing a test method that is consistent with that previously defined in the federal register.

The test method previously designated for benzene, ASTM D 3606, has been updated since the original publication of the rule. However, the parameters must be adjusted to allow for the resolution of ethanol and methanol from the benzene. In addition, the EPA GC/MS method has been demonstrated through ASTM round-robin testing to be an equivalent method for the measurement of benzene. Since the use of the EPA GC/MS method would allow two parameters (benzene and aromatics) to be performed with a single test, EPA believes the use of the EPA GC/MA method for the measurement of benzene would result in a reduced burden to the regulated industry, and, therefore, is proposing to allow its use as an alternate test procedure for the measurement of benzene



in gasoline.

### 3. Butane Test Methods [§ 80.46(h)]

Blendstocks require the same full set of parameter measurements as reformulated gasoline, since final properties must be extrapolated for all final blends. When butane designated for blending must be tested, the designated methods are generally not applicable, since the properties for butane typically fall outside the scope of the methods. Therefore, EPA is proposing to designate several test methods specifically for butane blendstock testing. ASTM D 2163-91 and D 5623-94 have been identified as suitable methods for the measurement of light hydrocarbons and sulfur respectively. The Gas Producers Association (GPA) has developed a method for the measurement of benzene and aromatics in butane. This method is GPA 2186-95. EPA is not proposing to designate a method for measuring olefins in butane. No consensus method currently exists for measuring total olefins in butane blendstocks. ASTM D 2163-91 will measure the lighter olefins, but not any heavier ones in the mix. EPA has identified a proprietary method, known as the Wasson ECE 383-01 method, which measures all of the olefinic compounds in the blendstock. This method is not a consensus standard, but is of the type that would be acceptable, due to its ability to measure total olefins.

#### 4. Volatility Test Methods [§§ 80.3(c) and (d)]

As discussed above, for the measurement of RVP, EPA proposes to eliminate the appendix containing EPA Method 3 (Appendix E) and designate ASTM D 5191-96 as the regulatory method, with the exception that the correlation equation as described in EPA Method 3 must be used in place of the correlation equation described in ASTM D 5191-96.

The measurement of alcohols, especially ethanol, for the volatility rule has been described in detail in Appendix F of 40 CFR Part 80. In this appendix, Method 1 describes a water extraction method, and Method 2 details a chromatographic procedure (an older version of ASTM D 4815.) In an effort to harmonize methods, EPA believes it would reduce the testing burden to allow test methods that are consistent with the reformulated gasoline rule. As a result, EPA proposes to eliminate Appendix F and designate ASTM D 5599-95 as the method for the measurement of alcohols in gasoline for the purpose of complying with the volatility regulations. Consistent with the reformulated gasoline rule, the use of ASTM D 4815-94a will be allowed as an alternate as long as this use is allowed under the reformulated gasoline rule.

#### 5. Diesel Fuel Test Methods [§§ 80.3(e), (f), and (g)]

When the diesel sulfur rule was originally published by

EPA, several methods were included for the measurement of the regulated properties. Included in these properties are sulfur concentration, cetane index, and aromatic content. The current designated test for sulfur is ASTM D 2622-87, with D 4294-83 being an allowable alternate. As discussed above, EPA proposes to substitute the current regulatory test method for sulfur, D 2622-87, with the latest version of this method, D 2622-94. EPA also proposes to substitute the alternate method for determining sulfur content in diesel fuel, D 4294-83, with the latest version, D 4294-90(1995), and substitute the current test method for cetane index, ASTM D 976-80, with the latest version, D 976-91.

The test for aromatics in diesel had been designated to be ASTM D 1319-88. EPA recognizes that ASTM describes this test as inadequate for the measurement of the aromatic content in diesel fuel. For some time, EPA has been performing ASTM D 5186 in parallel with D 1319, and found D 5186 to be superior in both precision and accuracy. The primary difficulty in changing from the use of D 1319 to D 5186 to measure compliance lies in the units reported by the two methods. The regulation specifies a limit on the aromatic content in volume per-cent, coincidentally the same units reported by D 1319. Unfortunately, D 5186 reports results in mass per-cent. In order to comply with the regulation, these results must be converted to volume per-

cent. EPA proposes to apply a conversion factor to the results. The equation to be used for the conversion of mass per-cent diesel aromatics to volume per-cent diesel aromatics is:

$$\text{Vol\%} = (\text{Mass\%} * 0.916) + 1.33$$

Where Mass% refers to the output from D 5186-96, the SFC test.

This equation is identical to that used by CARB in their conversion of mass per-cent results to volume per-cent results for the affirmation of regulatory limits.

This change should not impose any additional financial burden on industry, since it is not a required test. The option of measuring aromatics was originally placed in the rule to allow an alternate to the requirement that low sulfur fuels meet a minimum requirement of a 40 cetane index. The intent was to regulate aromatic content, and it was found that some fuels with high napthenic content could actually be very low in aromatics, yet still not meet the 40 cetane index level. The option to test for aromatic content would only be exercised if a fuel fails to meet the required cetane index level, a relatively infrequent occurrence.

## 6. Table of Test Methods

The following table sets out the test methods currently required under the fuels regulations at 40 CFR Part 80, and the corresponding proposed test methods:

Parameter	Old Test	New Test
<b>Reformulated Gasoline</b>		
RVP	EPA Method 3	ASTM 5191-96, Except that equation is as in Method 3
Benzene	ASTM D3606-92, With exceptions for Methanol and Ethanol	ASTM D3606-96, also with exceptions. In addition, the use of the EPA GC/MS Method for the measurement of Benzene will now be allowed as an alternate.
Distillation	ASTM D86-90	ASTM D86-96
Aromatics	EPA GC/MS Method (80.46)	EPA GC/MS Method (80.46) (No Change) Alternate is D1319-95a
Olefins	ASTM D1319-93	ASTM D1319-95a
Sulfur	ASTM D2622-92	ASTM D2622-94 (ASTM D5453-93 is Alternate for Conventional Gasoline to 9/1/98)
Oxygenates	EPA OFID Method (80.46)	ASTM D5599-95, Alternate is D4815*-94a
<b>Lead Phase Down</b>		
Phosphorus	Appendix A	ASTM D3231-94
Lead	Appendix B	ASTM D3237-90 (Atomic Absorbance) or D5059-92 (X-ray)
<b>Volatility</b>		
Alcohol		Consistent with Reformulated Gasoline
<b>Diesel Sulfur</b>		
Sulfur	ASTM D-2622-87, or D4294-83	ASTM D2622-94, or D4294-90(1995)
Aromatics	ASTM D1319-88	ASTM D5186-96
Cetane Index	ASTM D 976-80	ASTM D 976-91
<b>Blendstock Tests</b>		
Light Hydrocarbons in Butane		ASTM D-2163-91

Sulfur in Butane		ASTM D-5623-94
Benzene and Aromatics in Butane		GPA 2186-95
Olefins in Butane		Test procedure not specified. Wasson-ECE 383-01 is an example of an acceptable test procedure.

B. Gasoline and diesel fuel sampling procedures [proposed  
§ 80.8]

40 CFR Part 80, Appendices D and G, specify sampling procedures for gasoline and diesel fuel for all motor vehicle fuel programs under 40 CFR Part 80, including the programs for unleaded gasoline, gasoline volatility, diesel sulfur, RFG, and anti-dumping. Today's proposal would replace the sampling procedures in Appendices D and G with the following ASTM standard practices:

- D 4057-95, "Standard Practice for Manual Sampling of Petroleum and Petroleum Products;"
- D 4177-95, "Standard Practice for Automatic Sampling of Petroleum and Petroleum Products;"
- D 5842-95, "Standard Practice for Sampling and Handling of Fuels for Volatility Measurements;" and
- D 5854-95, "Standard Practice for Mixing and Handling of Liquid Samples of Petroleum and Petroleum Products."

Appendices D and G were adopted from the 1981 version of D 4057. Over time, however, ASTM has updated D 4057, and these changes are not reflected in Appendices D and G. For example, Appendix D addresses the collection of samples from a "tap" in the shell of a petroleum storage tank. The current requirement under Appendix D, reflective of D 4057-81, requires that taps extend at least three feet into the storage tank. See, ¶ 11.3.1.1 of Appendix D. However, tap extensions are necessary only for heavy petroleum products (and not for gasoline and diesel fuel), and, furthermore, tap extensions are not possible with floating roof storage tanks that are commonly used today. As a result, EPA and regulated parties currently agree to waive the tap extension requirement on a case-by-case basis. Under D 4057-95 sampling tap extensions are not required for light petroleum products such as gasoline and diesel fuel, so that if this ASTM procedure were adopted the tap extension issue would be resolved for all cases.

EPA is proposing to adopt three ASTM methods in addition to D 4057-95 in order to include procedures that address a broad scope of sampling situations that are relevant to EPA's motor vehicle fuels programs. D 4177-95 deals with automatic sampling of petroleum products, which is relevant under the anti-dumping regulations for refiners who produce conventional gasoline using an in-line blending



operation where automatic sampling is necessary. Similarly, D 5842-95 deals with sampling and sample handling for volatility measurement, which is relevant to determining compliance with the volatility standards in § 80.27 and the RFG standards in § 80.41. Last, D 5854-96 deals with the creation of composite samples, which is relevant under the RFG and anti-dumping programs in certain situations involving imported gasoline where the gasoline from multiple ship compartments is treated as a single batch.

EPA believes it is appropriate to replace Appendices D and G with ASTM standard practices. The current ASTM practices reflect up to date procedures, which if followed would result in improved sample quality for regulatory purposes. In addition, the adoption of industry standard procedures would reduce regulatory burden because parties would be able to follow their customary practices when meeting regulatory requirements.

### **III. RFG and Anti-dumping Standards/Models**

#### **A. Standards and Requirements for Compliance [§§ 80.41 and 80.101]**

##### **1. Averaging Per-Gallon Minimum Standards for NOx [§§ 80.41(d) and (f); § 80.68(b)(1)(iv)]**

Reduction of NOx emissions is a prominent feature of Phase II of the Reformulated Gasoline Program which goes into effect on January 1 of 2000 (Phase I provides control

at a "no NOx increase" level). The Phase II standard for refiners choosing to comply on average (requiring a 6.8% reduction from baseline during the high ozone season) sets the level of NOx emission reduction required on average by these refiners. Thus, for refiners who choose to average, the averaging standard effectively controls the overall environmental benefit contributed to the program by these refiners.

In addition to the average NOx standards, though, there are also per-gallon minimum reduction standards for refiners that choose to average (not to be confused with standards for overall compliance on a per-gallon basis). The averaging minimum standard in Phase II requires that each gallon (batch) of RFG in the high ozone season has at least a 3% reduction from the statutory baseline; the corresponding Phase I standard holds any increase over statutory baseline for a batch to 2.5%. Less stringent minimum standards apply outside of the high ozone season in Phase II. The per-gallon minimum standards are in addition to the year-long average standard of a refinery's output of a given type of RFG and these minimum standards set the NOx reduction which must be achieved by each batch (and therefore each gallon) of RFG.

These NOx per-gallon minimum standards were not put in place to provide any incremental environmental benefit

beyond that provided by the average standard, but rather to ensure an even distribution of program benefits from area to area and through time. This primary reason for the averaging per-gallon minimum standards (for NO<sub>x</sub> and other parameters as well) was discussed in the enforcement section of the preamble to the RFG final rule (Section VII). An additional but secondary objective of the minimum standard was to augment the ability of enforcement authorities to detect non-RFG gasoline being illegally sold in RFG areas. For reasons that will be discussed more fully below, EPA is proposing to eliminate the per-gallon minimum standards for NO<sub>x</sub> and to accomplish the same objectives that these standards would have accomplished by substantially expanding the number of area-by-area surveys of RFG emission performance required to be conducted by refiners choosing to average. EPA is not proposing any change to the averaging standard for NO<sub>x</sub>.

#### The Problem With the Per-Gallon NO<sub>x</sub> Minimums

When EPA imposed the per gallon minimum standards, data did not exist to adequately assess the variability, within refineries' output, of NO<sub>x</sub> quality or the factors that affect it across all of the batches of gasoline produced in a year.

Representatives of the gasoline refining industry (the American Petroleum Institute (API), the National Petroleum

Refiners Association (NPRA) and representatives of various of their member companies) have presented data to EPA<sup>1</sup> showing that NOx performance of actual RFG retail samples varies substantially by octane grade and from batch to batch<sup>2</sup> within a grade. The processes involved in gasoline production result in a broad bimodal<sup>3</sup> distribution of NOx quality, with premium batches showing characteristically lower NOx emissions and regular batches, with their higher levels of sulfur and olefins, showing higher NOx emissions.<sup>4</sup>

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<sup>1</sup> Industry representatives met with EPA personnel on January 14, 1997 and presented a graphical analysis which can be found in the docket for this rulemaking. Docket Number A-97-03, Item Number II-E-1.

<sup>2</sup> Since these were retail samples, they could not truly reflect batch-to-batch variability due to the intermingling of gasolines from different batches, and even from different sources, in the distribution system.

<sup>3</sup> A bimodal distribution here refers to one that has two distinct frequency peaks or two values around which a large number of batches will gather.

<sup>4</sup> Engineering judgment would lead to a conclusion that a broad distribution of NOx quality differing markedly between premium and regular gasoline grades would exist in the gasoline pool. First, NOx quality under EPA's complex model is primarily a function of sulfur and olefin content in the gasoline. Thus, differences in either of these properties would result in differences in NOx quality. Second, in the refinery, processes which typically contribute large volumes to the regular gasoline grade are often high in sulfur and olefins, whereas processes contributing heavily to the premium gasoline pool are often very low in olefins and sulfur. For example, the fluid catalytic cracker (FCC) unit in a refinery breaks large molecules into smaller ones and is the "workhorse" of most refineries and the largest contributor of any refinery unit to the gasoline pool. The gasoline produced by the FCC unit is highly olefinic, and, depending upon the crude oil source for the refinery, usually

These data on gasoline produced under the simple model requirements showed a very substantial proportion of regular grade RFG samples that would have failed to meet the Phase I minimum reduction standard that applies beginning in 1998.

In order to bring these higher NOx batches of regular RFG into compliance, the refiners suggested that the industry would have to incur substantial additional costs in excess of those calculated in EPA's Regulatory Impact Assessment which EPA relied upon in adopting the standards for RFG in 1993. That assessment of the costs of compliance for NOx was based upon the cost of meeting the average standard, not the per-gallon minimum that applies to

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very high in sulfur. FCC gasoline also possesses octane quality consistent with regular gasoline. For this reason and since regular gasoline is typically the highest volume product of U.S. refineries, most of the product produced by the FCC is used in the production of regular gasoline. On the other hand, premium gasolines, which differ from regular grades primarily in the higher octane quality they possess, contain lower amounts of FCC streams and higher levels of high-octane aromatic streams produced by catalytic reformers. Such streams, called reformate, are extremely low in olefins and also very low in sulfur. Thus, a much lower level of sulfur and olefin content and therefore, better NOx quality, is found in the premium pool as compared to the regular pool. (A 1989 study of blendstocks used to produce U.S. gasoline found FCC blendstocks possessing an average octane quality of 86.4, an average olefin content of 29.1 percent, and an average sulfur content of 756 parts per million (ppm). The same study found that reformate streams, produced by the reformer, possessed octane quality of 92.6, an olefin content of less than 1 percent and an average sulfur level of 55 ppm. See "NPRA Survey of U.S. Gasoline Quality and U.S. Refining Industry Capacity to Produce Reformulated Gasolines - Part A", National Petroleum Refiners Association, 1991 Gasoline Study, January, 1991, Docket number Docket Number A-97-03, Item Number II-B-1.)

refineries that average, which is the subject of this proposal. They further argued that in the absence of a substantial enforcement tolerance to account for the uncertainty of measurement (especially of olefin levels) in downstream enforcement sampling, the bimodal frequency distribution would have to be shifted further than would otherwise be required. While the problem created by the NOx minimum would already be substantial in Phase I with the 1998 introduction of the complex model, the refiners suggested that Phase II's tighter minimum standard for NOx in the year 2000 would exacerbate an already very difficult situation, even given the changes made to refinery processes in order to be able to comply with the Phase II average standard.

The distribution of retail sample data initially presented by the refiners in their general meeting with the Agency described the net result of the product intermingling that occurs in the gasoline distribution system. By describing all of the nation's gasoline taken together, these data could suggest the existence of a problem (high variability with many samples below the minimum reduction standard), but could not indicate much about how widespread the problem is or show what types of refineries are likely to be affected. By examining historical RFG reporting

data<sup>5</sup>, EPA was able to confirm the general factual basis of the industry analysis. Specifically, the data showed a broad distribution of NOx quality with the premium batches clustered near the high end (high NOx reductions), while regular batches are more spread out with central tendency nearer the low end and many batches falling below the Phase I NOx minimum. Left unanswered by either the industry-supplied information or EPA's own analysis, was the question of whether refiners could exercise any control over the variability and shape of the frequency distribution that was evident in both data sources. In other words, it was not clear what options were available to refineries to remedy the problem.

To provide additional insights, EPA and a refinery expert from the Department of Energy met separately with individual refiners in order to look at batch data from single refineries using differing gasoline production approaches. The refineries represented by the companies EPA met with comprised a very diverse group. They varied with regard to size, general level of technology, control over inputs, historical product slate, and other characteristics.

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<sup>5</sup> Data on the characteristics of gasoline batches as they are shipped from the refinery are submitted to EPA as part of the reporting requirements of the RFG regulations. An aggregated analysis that protects the confidentiality of individual refiners' data can be found in the docket for this rulemaking. Docket Number A-97-03, Item Number II-A-5.

EPA focused the agenda for these meetings on three basic questions: 1) For each separate refinery, what is the batch-to-batch distribution of NOx quality by grade and season, 2) what are the causes of the variability that is observed in the historical data--which parameters account for the variability in NOx, and what caused them to vary the way they did, and 3) how do refinery managers plan to meet the NOx minimum standards in the absence of a substantial enforcement tolerance or regulatory relief.

The general picture of the broad bimodal distribution of gasoline NOx quality by grade that was developed from overall industry analyses and examination of our own data was generally confirmed in these more detailed meetings.

As might be expected, individual facilities varied considerably in the size of the challenge posed by the NOx minimum standards and they expected to address that problem with varying strategies. The pattern that emerged from all of these discussions was that refiners intend to pursue the least capital-intensive solutions wherever possible, even to the extent of incurring substantial additional production costs in the short run. Although the strategies articulated in these meetings<sup>6</sup> did not precisely conform to the pattern

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<sup>6</sup> Some general examples of the approaches which are likely to be used to bring sub-minimum batches above the standard include: finding another use for the poor NOx quality gasoline or its components (shifting it to conventional gasoline, if that



expected by the industry associations (shifting the entire distribution of NOx quality), they seemed to lead to the same result economically--excess costs in producing RFG beyond the costs of making the refinery's average conform to the average standard. Any major expansion of the RFG program as a result of areas opting into the program could further increase the costs of meeting the minimum standard.

#### Objectives of the NOx Minimum Standards

The primary purpose of the NOx minimum is to assure an even temporal and geographic distribution of the program's environmental benefits. To put this more simply, the minimum is intended to ensure that no area covered by the RFG program will suffer from impaired air quality (possibly resulting in an exceedance of the NAAQS for ozone) as a result of a single refinery's shipping a batch of high NOx gasoline to an area for which it was a primary supplier. An additional, though secondary, purpose of the NOx minimum standards is to provide a tool for detecting the illegal sale of non-RFG gasoline in areas covered by the program. This would work by keeping legitimate RFG above the minimum, while illegally sold non-RFG might fall below the standard.

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can be done without violating anti-dumping standards, or shifting it to other products) and buying conforming RFG on the spot market to take its place; reblending the poor NOx quality batches with clean blendstocks purchased from the outside to make them conform to the minimum; or simply reducing RFG production.

**Avoiding distribution problems.** The RFG regulations incorporated two mechanisms to avoid the unlikely event of an area being shortchanged on NOx quality due to refinery gate averaging--the minimum standard and the RFG gasoline quality surveys.<sup>7</sup> These surveys were specifically intended to guard against uneven distribution of benefits. In the event that the surveys find a covered area to have received less than the intended NOx emission reduction benefits, the regulations provide for a substantial tightening of the average standard--an outcome that would be expensive to the industry and one that it will work hard to avoid. This proposal includes an increase in the number of surveys to be conducted (an additional 20 surveys per year) that should improve the surveillance of gasoline quality on an area-by-area basis.

**Detecting non-conforming gasoline.** A detailed examination of 1995 and 1996 actual batch-by-batch gasoline quality (NOx performance) shows that the NOx minimum

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<sup>7</sup> A program of gasoline quality surveys is required to be conducted by refiners that wish to comply on average rather than on a per-gallon basis. The surveys must be done by an independent contractor in accordance with a statistically sound sampling plan approved by EPA. The location and timing of surveys is determined by EPA with minimal advance notice to the industry's contractor. If survey averages fall short of the criteria set out in the regulations, the average standards and/or the minimum standards are made more stringent for subsequent years for all of the refineries that supplied gasoline to the area(s) where the failure occurred.

standard is not a very useful tool for detecting contamination of RFG by illegally sold conventional gasoline, since many batches of conventional gasoline, especially premium grade, are in compliance with the minimum standard. Minimum standards for other gasoline characteristics (especially oxygen content and benzene levels) provide far superior capability for determining if contamination by non-complying gasoline has taken place<sup>8</sup>. The proposed expansion of the survey program would further enhance these enforcement efforts, since analysis results for survey samples found to be out of compliance with RFG requirements are immediately supplied to EPA's enforcement office.

#### Conclusions and Proposed Regulatory Actions

EPA believes, as a result of the investigations discussed above, that the averaging minimum standards for NO<sub>x</sub> are likely to be costly to the industry as a whole in both phases of the program, and will make the 1998 complex model implementation extremely difficult for a portion of existing refineries. With the additional costs in question, the overall cost of compliance is likely to exceed the cost upon which the standards were based (the cost of meeting the

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<sup>8</sup> Analysis in support of this conclusion has been placed in the docket for this rulemaking. Docket Number A-97-03, Item Number II-A-6.

average standard) without providing additional environmental benefits. By increasing the costs of producing RFG, these standards may contribute to a higher cost differential between RFG and conventional gasoline and so pose a significant obstacle to smooth implementation of Phase II of the program. Since the per-gallon minimum standards for NOx do not increase the environmental benefit and their purposes can be as easily served by the RFG surveys, EPA proposes the elimination of these per-gallon minimum standards.

Since the RFG surveys provide an alternative tool for accomplishing both of the purposes of the NOx per-gallon minimums, it is important that the survey program remain adequate to perform these tasks. The regulations at §80.68(b)(1) currently prescribe 50 surveys beginning in 1998, with adjustments provided for opt-in of additional programs and/or potential survey failures. EPA believes that 20 additional surveys would provide significant additional protection of the NOx quality of gasoline in those RFG covered areas with limited sources of supply. Accordingly, EPA proposes that the number of surveys in the initial schedule (§80.68(b)(1)) for each year beginning in 1998 be expanded by 20. EPA invites comments on this proposed change.

2. Clarification that Model Limits Constitute Standards [proposed § 80.41(h)(3) and § 80.78(a)(1)(vi);

revised § 80.101(b)(3)].

Both the simple and the complex models include restrictions on the range of parameter values that may be used with these models. See §§ 80.42(c) and 80.45(f) for the simple model limits and the complex model limits, respectively. These parameter range limits are included because the simple and complex models have not been shown to accurately predict emissions when parameter values outside the range limits are used. For this reason, §§ 80.42(c) and 80.45(f) state that the models may not be used for fuels with parameter values that are outside the valid range limits. The complex model specifies different valid range limits for reformulated versus conventional gasoline. Compare § 80.45(f)(1)(i) (complex model range limits for reformulated gasoline) with § 80.45(f)(1)(ii) (complex model range limits for conventional gasoline).

EPA always has considered the valid range limits to constitute standards that apply to reformulated and conventional gasoline. Gasoline subject to simple or complex model standards must be evaluated for compliance with these standards. Where gasoline has property values outside the valid range limits, it cannot be evaluated and, therefore, it is unlawful to produce and sell such gasoline.

Today's proposal would clarify that the valid range limits are standards, by citing the valid range limits along

with the other standards that apply to reformulated and conventional gasoline. In addition, EPA is proposing to add a provision to the reformulated gasoline prohibitions under § 80.78(a) that addresses the valid range limit standards. This prohibition would clarify that the complex model valid range limits apply not only to reformulated gasoline when produced or imported, but throughout the distribution system as well. The complex model valid range limit standards must be applied downstream of the refinery or importer because complex model standards apply throughout the distribution system, i.e., the VOC and Nox minimum per-gallon emissions performance standards. In order to evaluate reformulated gasoline for compliance with these downstream standards, the gasoline must have parameter values that are within the valid range limits.

EPA is proposing to promulgate the revisions contained in this rulemaking under the authority of both §§ 211(k) and (c) of the Act, except for the revisions which would include the valid range limits as standards under § 80.41 and § 80.101. EPA proposes to promulgate the revisions concerning the valid range limits under the authority of § 211(k), but not § 211(c). EPA is proposing to promulgate the valid range limits as standards solely for the purpose of ensuring that the models will accurately predict emissions, and not for the independent purpose of achieving emissions

reductions from the range limits themselves. As a result, EPA believes that it is not necessary to promulgate the valid range limits as standards under the authority of § 211(c).

### 3. Effective Dates for Standard Changes Due to Survey Failures [§ 80.41(p)]

Section 80.41(p) states that when a minimum or maximum per-gallon reformulated gasoline standard is changed to be more stringent as a result of a survey failure, the effective date for the new standard is ninety days after EPA announces the new standard. EPA now believes that additional time is necessary in order to ensure an appropriate transition to a new standard as a result of the lag time between the date refiners and importers begin producing gasoline to a new standard, and the date this gasoline displaces the earlier gasoline through the distribution system.

For this reason, EPA is proposing a staged introduction to a new per-gallon standard, that results from a survey failure. The dates the new standard would be required would be expressed in the number of days after the date EPA announces the new standard: 60 days for gasoline produced at a refinery or imported by an importer; 120 days for facilities downstream of the refinery or importer other than retail outlets and wholesale purchaser-consumers; and 150

days for retail outlets and wholesale purchaser-consumers. Under the proposed approach refiners and importers would have about two months to begin meeting the new standard, downstream parties such as terminal operators then would have about two months to transition to the new standard after shipments of gasoline meeting the new standard begin, and retailers and wholesale users would have about one month to transition after terminals must begin shipping gasoline meeting the new standard.

EPA believes the times proposed for these stages are consistent with current industry practice for transitioning to new standards, such as the transition to meet the summertime high ozone season standards each spring. For example, terminals supplying RFG must have gasoline that meets the VOC-control standard beginning on May 1 each year, and retailers and wholesale purchaser-consumers in RFG areas must meet the VOC-control standard beginning about one month later, on June 1.

Refiners must begin producing VOC-controlled RFG early enough before May 1 that the gasoline distribution system through the terminal level can transition from non-VOC-controlled gasoline to VOC-controlled gasoline by May 1. The date when particular refiners begin producing VOC-controlled RFG each year varies depending on factors such as the time necessary to transport gasoline from the refinery



to the terminals, and the rate of turnover at the terminal. However, EPA believes that most long-distance distribution systems are able to transition within 60 days of the date refiners begin shipping gasoline meeting the new standard.

EPA is able to enforce the VOC-control standard at refineries based on the refiners' batch reports to EPA that identify gasoline batches as either VOC-controlled or non-VOC-controlled; the VOC-control standards apply only to batches that are identified as VOC-controlled. However, there is nothing in the refiners' batch reports to EPA that identifies the per-gallon minimum and maximum standards to which the gasoline is subject. As a result, EPA must rely on a date certain on which the new standard applies at the refinery. Moreover, EPA believes this date must be sufficiently earlier than the date the new standard applies at the terminals in order to ensure the availability to terminals of gasoline meeting the new standard for the terminals' transition. EPA also believes that 60 days is an appropriate length of time for terminal transitions, based on experience with VOC-control transitions.

B. Complex Model [§ 80.45]

1. Proper E300 Value for the Edge Target Fuel for Use in Complex Model Extrapolation [§ 80.45(c)(1)(iv)(C)(6)]

The Complex Model as described in §80.45 includes provisions for extrapolations beyond the limits of the data

upon which the model was based. The limits of the data define the "allowable range" which represents the range of fuel parameters within which the Complex Model equations are directly applicable, and outside of which extrapolation must be used up to the limits of the model<sup>9</sup>. These extrapolations take the form of intricate equations and a series of conditions for use of those equations. Among other things, the conditions associated with extrapolation direct Complex Model users to determine properties for an "edge target fuel." The edge target fuel is equivalent in all respects to the target fuel, except that no fuel parameters are allowed to exceed the limits of the allowable range. In effect, the edge target fuel represents the point in the multi-dimensional fuel parameter space where extrapolation begins.

The Complex Model equation for exhaust volatile organic compounds (VOC) contained in § 80.45(c)(1) includes a single interactive term. This term, the product of E300 and aromatics, necessitates that extrapolations involving E300 include a simultaneous evaluation of the aromatics level of the target fuel. Thus in paragraph (c)(1)(iv)(C)(6), Complex Model users are directed to determine whether the

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<sup>9</sup> The allowable range of the model is, in fact, a combination of the limits of the data and additional limitations that may be imposed by the existence of extreme, or curve turnover points.

mathematical phrase  $[80.32 + (-.390 \times \text{ARO})]$  is greater or less than 94, and to set the E300 edge target fuel value accordingly. In so doing, users are determining whether the aromatics-dependent E300 extrema (i.e. curve turnover) point falls beyond the limits of the available data in the Complex Model database.

However, the language in paragraph (c)(1)(iv)(C)(6) is misleading. As currently written, the user is directed to set the E300 value of the edge target fuel at 94 vol% whenever the value of the phrase  $[80.32 + (0.390 \times \text{ARO})]$  is greater than 94. The Agency's intention, however, was that this step be taken only if the E300 term is being extrapolated. In other words, if the target fuel value for E300 falls below the higher limit for E300 in the allowable range as defined in Table 6, §80.45(c)(1)(iv), then E300 is not being extrapolated, and the E300 value of the edge target fuel should be equal to the E300 value of the target fuel.

To correct this problem, the language in § 80.45(c)(1)(iv)(C)(6) and its counterpart applicable to Phase II calculations at § 80.45 (c)(1)(iv)(D)(6) would be changed such that Complex Model users will only set the E300 value of the edge target fuel equal to 94 if the target fuel value for E300 exceeds the higher limit specified in Table 6, §80.45(c)(1)(iv).

#### IV. RFG Compliance Requirements

##### A. Sampling of reformulated and conventional gasoline [proposed § 80.47]

Under § 80.65(e)(1) refiners and importers are required to collect a representative sample from each RFG batch produced or imported, and to determine the batch properties based upon analysis of this sample.<sup>10</sup> "Batch of reformulated gasoline" is currently defined in § 80.2(gg) as "a quantity of reformulated gasoline which is homogeneous with regard to those properties which are specified for reformulated gasoline certification." Similarly § 80.101(i)(1)(i)(A) requires refiners and importers of conventional gasoline to collect a representative sample from each batch produced or imported, and to determine compliance with the anti-dumping standards based upon the batch samples.<sup>11</sup>

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<sup>10</sup> Under § 80.69(b) oxygenate blenders who meet the oxygen standard on average also are required to sample and test each batch of RFG produced using RBOB, and the discussion in this preamble section applies to such oxygenate blenders in the same manner as for refiners of RFG.

<sup>11</sup> EPA is proposing several changes relative to the sampling of conventional gasoline that are discussed below in section VI.B. of this preamble. EPA is also proposing to revise the "batch" definition in § 80.2(gg) to apply to conventional gasoline and not just to RFG. EPA also is proposing to require refiners and importers of conventional gasoline to separately test each batch, which would eliminate the current option of testing a number of batches together using a composite sample.

In addition, EPA is proposing a definition for "previously

As a result, refiners and importers are required to collect a representative sample of each gasoline batch. However, EPA has not previously promulgated requirements for determining when a quantity of gasoline is homogeneous so that it qualifies as a batch. Today EPA is proposing such requirements for determining batch homogeneity. In addition, EPA is proposing procedures whereby an importer of reformulated or conventional gasoline would be able to treat as a single batch the gasoline contained in multiple compartments of a ship.

It is important that refiners and importers determine compliance with the reformulated and conventional gasoline standards using samples collected from quantities of gasoline that are homogeneous in terms of the properties relative to these standards. If a quantity of gasoline is not homogeneous, a sample of that gasoline often will not reflect the overall average qualities of the gasoline. For example, when a refiner produces gasoline by combining blendstocks having different volatilities, unless the tank is thoroughly mixed the gasoline often will be horizontally stratified, with the higher volatile blendstocks at the top

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certified gasoline" to mean RFG and conventional gasoline for which the refiner, oxygenate blender or importer has met applicable requirements and standards and that the refiner, oxygenate blender or importer has included or intends to include in the refinery or importer compliance calculations.

of the tank and the lower volatile blendstocks at the bottom of the tank. If a sample is collected of the gasoline at any one spot in such a stratified tank the sample only will reflect the properties of the gasoline at that strata. Storage tank sampling techniques such as "all level samples" or "running samples" tend to compensate for stratified product, but these techniques do not assure a truly representative sample.<sup>12</sup>

In the case of RFG, moreover, certain standards must be met on a per-gallon basis. If any portion of the RFG in a storage tank violates an applicable per-gallon standard, this gasoline portion is out of compliance even if the gasoline in the tank would be in compliance if fully mixed. For example, consider a refinery storage tank containing RFG designated as simple model, VOC controlled for Region 2. If the gasoline is stratified by RVP, and the RVP of the upper strata is greater than the applicable per-gallon maximum

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<sup>12</sup> A "running sample" of the product contained in a storage tank is collected by lowering a sample container from the top of the product to the bottom and then raising the container to the top, at such a speed that the container is less than full when removed from the tank. See, 40 CFR Part 80, Appendix D, ¶ 11.2.2.2. An "all levels sample" is collected by lowering a stoppered container to the bottom of the product in a storage tank, removing the stopper with a cord or chain, and raising the container to the top at such a speed that the container is less than full when removed from the tank. See, 40 CFR Part 80, Appendix D, ¶ 11.2.2.1. In theory, both of these sampling methods obtain product from all strata in the storage tank somewhat in proportion to the size of the strata.

standard of 8.3 pounds per square inch (psi), the gasoline in this upper strata would violate the applicable per-gallon standard even if the average RVP of the gasoline in the tank is less than 8.3 psi.<sup>13</sup> A single sample from such a stratified tank may not reflect the violation. Even an "all levels" or "running" sample of the gasoline in a stratified storage tank could yield a test result within the standard because to a certain extent such a sample "averages" across the strata, which would have the effect of masking the violation.

As a result, EPA is proposing that refiners and importers would be required to establish that each quantity of reformulated or conventional gasoline that will be treated as a batch is homogeneous before the batch sample is prepared or analyzed.

EPA is proposing two options by which the homogeneity of the gasoline in a storage tank could be established. Under the first option, a refiner would collect three separate samples from the storage tank -- upper, middle, and lower spot or tap samples. These samples would be analyzed for each parameter relevant to applicable standards, and the gasoline in the storage tank would be considered homogeneous

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<sup>13</sup> Per-gallon standards must be met by all portions of the gasoline contained in a storage tank in part because the different gasoline portions may be distributed without further mixing.

if the test results agree within the ranges specified in § 80.65(e)(2)(i).

Under the second option for establishing storage tank homogeneity, the party would demonstrate that it followed tank mixing procedures that can be shown to result in homogeneity. For example, a refiner could meet the homogeneity requirement through records that show the tank mixing procedures used for a batch (tank size and type, volume of gasoline, the type of tank mixers, the mode of mixer operation if appropriate, and the duration of mixer operation), together with historic sampling and testing records demonstrate these procedures result in complete mixing.

Under this second storage tank option, success of the mixing procedure must still be confirmed for each batch. However, instead of requiring analysis for each parameter relevant to applicable standards, only API gravity analysis of upper, middle, and lower spot or tap samples would be required. The gasoline would be considered homogeneous under this option if the demonstrated mixing procedure was performed, and the API gravity values for the upper, middle, and lower samples do not differ by more than 0.3° API. Where the configuration of a storage tank does not permit the collection of upper, middle, and lower spot or tap samples, the API gravity analysis to confirm the success of



the mixing procedure would be waived.

EPA also is proposing procedures whereby an importer would be able to demonstrate the gasoline in multiple compartments of a marine vessel is homogeneous. The importer would collect a "running" sample from each compartment and analyze the samples for each parameter relevant to applicable standards. The vessel's gasoline would be homogeneous and could be treated as a batch if the results agree within the ranges specified in § 80.65(e)(2)(i).

EPA is proposing that for purposes of establishing homogeneity a party could use test methods other than the methods specified in § 80.46. The methods in § 80.46 would still be used to establish the batch properties for "certifying" a batch.

EPA also is proposing that in the case of RFG, the gasoline contained in a storage tank or marine vessel would not be considered homogeneous if any sample collected to establish homogeneity has a test result that exceeds an applicable per-gallon standard. Thus, in the case of standards a refiner or importer is meeting on a per-gallon basis no test result could violate the per-gallon standard, and in the case of standards being met on average no test result could violate an applicable per-gallon minimum or maximum standard.

EPA is proposing additional options by which an importer could treat the gasoline imported by marine vessel as a single batch without determining the homogeneity of the gasoline. RFG contained in multiple compartments of a marine vessel could be certified as a single batch using a volume weighted composite of samples collected from the compartments if the entire contents of these compartments is transferred into a single shore tank. EPA is proposing this option because it is likely the gasoline from multiple vessel compartments is completely mixed, i.e., becomes homogeneous, through the process of being transferred into a shore tank.

Under today's proposal importers also would be allowed to use composite samples to certify as a single batch the RFG imported by marine vessel where the gasoline is off-loaded into multiple shore storage tanks. Under this option, however, the importer would be required to demonstrate that the RFG off-loaded into each shore tank separately meets all applicable per-gallon standards, without regard to any gasoline contained in the storage tank prior off-loading the imported gasoline (or, "heel"). Thus, the importer would be required to sample and test the tank heel prior to off-loading the imported gasoline and the tank contents after the imported gasoline has been added, and to mathematically calculate the properties of the imported

gasoline added to the tank.

EPA is proposing that imported conventional gasoline contained in multiple compartments of a marine vessel could be tested using a volume weighted composite of samples collected from the compartments with one limitation. There are no per-gallon standards associated with conventional gasoline (other than the complex model limit standards, as is discussed in section III.A.1. of this Preamble), and, as a result, there are no proposed requirements to separately test vessel compartment or shore tanks. However, EPA is proposing that each separate grade of conventional gasoline on a marine vessel (e.g., regular, premium) must be treated as a separate batch. EPA believes that, in general, there is greater variability in the properties of gasolines of different grades, than of gasolines of the same grade. The proposed grade limitation on marine vessel compositing for conventional gasoline would constitute some limit on the range of gasoline properties that could be included in a single composite sample, which EPA believes would improve the quality of composite samples. EPA requests comment on this proposed limitation on the use of composite samples of imported conventional gasoline.

C. General Requirements [§ 80.65]

1. Assignment of Batch Numbers [§ 80.65(d)(3)]

Section 80.65(d)(3) requires refiners and importers to

assign batch numbers to batches of RFG, RBOB, conventional gasoline, and certain blendstock that is included in the refiner's compliance calculations. The batch numbers are used to identify batches in batch reports submitted to EPA under §§ 80.75(a) and 80.105(a).

EPA is proposing to revise § 80.65(d)(3) to require oxygenate blenders who meet the oxygen standard on average to assign batch numbers to RFG batches. This would conform § 80.65(d)(3) with the current reporting requirement at § 80.74(a), that oxygenate blenders who meet the oxygen standard on average must submit batch reports to EPA.

2. Clarifications of requirement to test RFG and RBOB  
[§ 80.65(e)(1)]

Section 80.65(e)(1) requires refiners and importers to determine the properties of each batch of RFG that is produced or imported. Gasoline that complies with the standards in § 80.41 is deemed certified (§ 80.40(a)), hence this process is commonly considered as "certifying" each batch. This determination is required for each parameter relevant to the RFG standards. EPA is proposing two clarifications of § 80.65(e).

EPA is proposing to add language to § 80.65(e) to clarify that this section applies to RBOB as well as to RFG, and to add a cross reference to the requirement in § 80.69(a)(2) that the certified properties of RBOB are the

properties of the RBOB subsequent to downstream blending with oxygenate, based on test results of a sample of the RBOB hand blended in the laboratory with the appropriate oxygenate type and amount. EPA believes the certification of RBOB already is implicit in § 80.65(e), and that refiners and importers have been certifying and reporting the properties of RBOB based on the analysis results of a hand blend, so that the proposed changes would not change current practices.

EPA also is proposing to clarify that certification testing for RVP is necessary only for RFG and RBOB that is designated as VOC controlled, because RVP test results are relevant only to VOC controlled gasoline. Under the simple model the RVP standard applies only to VOC controlled product. RVP test results are an input to the complex model only for VOC controlled gasoline; in the case of non-VOC controlled gasoline the complex model uses an RVP value of 8.7 psi regardless of the actual RVP value of the gasoline. This change to § 80.65(e) also would change the reporting requirement for RVP, to apply only to VOC controlled RFG and RBOB, because the parameter reporting requirement in § 80.75(a)(2)(v)(B) cross references the requirements in § 80.65.

### 3. Weight Percent Range for Total Oxygen Content

[§ 80.65(e)(2)(i)]

Section 80.65(e)(2)(i) provides a table with ranges for fuel properties to be used in comparing the refiner's or importer's test results to the test results obtained from the independent laboratory. The table at § 80.65(e), however, currently does not include a range for total oxygen content. The RFG regulations prescribe a standard for weight percent oxygen, and refiners and importers of RFG are required to determine and report the total weight percent of oxygen in each batch of RFG for compliance purposes. It is appropriate, therefore, to include a range for total oxygen content in the table at § 80.65(e) for purposes of comparing the refiner's or importer's test results with the test results obtained from the independent laboratory. A range for total weight percent oxygen content was unintentionally omitted in the final rule. As a result, today's rule proposes to add to the table at § 80.65(e)(2)(i) a 0.10 wt% range for total oxygen content. This range would be in addition to, and not instead of, the volume ranges for oxygenates listed in § 80.65(e)(2)(i).

The 0.10 wt % range for total oxygen was derived by multiplying the values of the oxygenates in the table in section 80.65(e)(2)(i) by the weight % of the oxygen in the oxygenates and averaging them. EPA acknowledges that this approach assumes that the density of these oxygenates is similar to gasoline, but believes that any difference in

density would result in an insignificant increase in the 0.10 wt % value. EPA continues to believe that this is an appropriate method of determining an appropriate range for total oxygen content between the refiner's laboratory and the independent laboratory.

4. Independent Laboratory Requirements [§ 80.65(f); proposed §§ 80.72, 80.74(h), and 80.75(n)]

Sections 80.65(e) and (f) contain the independent laboratory requirements for RFG. Under § 80.65(e)(1) each batch of RFG must be analyzed, either by the refiner or importer, or by an independent lab. Section 80.65(f) requires each refiner and importer of RFG to designate an independent lab that must collect a sample from each batch of RFG. The refiner/importer then has the option of having the independent lab meet the analysis requirement for all RFG batches (the 100% analysis option), or of having the independent lab analyze up to 10% of the samples collected to be identified by EPA (the 10% analysis option). The 100% analysis option is most often chosen by importers who do not operate their own company laboratory.

EPA is proposing two categories of changes to the independent laboratory requirements. The first category of changes would include in the regulations the guidance EPA previously has issued regarding the identification of

samples for analysis by independent labs, and the identification of samples the independent lab would send to EPA. The second category would slightly narrow the criteria by which a laboratory is considered independent. In addition, EPA is seeking comment on whether companies that serve as independent laboratories under the RFG program should be made directly responsible for properly completing the functions of sample collection, analysis, record keeping and reporting.

The first category of changes being proposed relate to the identification of samples to be analyzed under the 10% analysis option, and the identification of samples to be supplied to EPA under both the 10% and the 100% analysis options.

Sections 80.65(f)(1)(ii)(B) and (C) state that under the 10% independent analysis option, EPA will identify which samples the independent lab must analyze. However, the regulations do not specify the mechanism by which EPA identifies these specific samples. EPA subsequently provided this sample-identification guidance in Reformulated Gasoline and Anti-Dumping Questions and Answers (October 3, 1994), titled "Reformulated gasoline program protocol for use by independent labs in selecting samples for analysis under the 10% independent analysis option, and for identifying samples to ship to EPA." This protocol has been



in use since it was issued, and EPA has received no adverse comments from regulated parties regarding this protocol. Therefore, EPA proposes to incorporate this protocol in the RFG regulations. See proposed § 80.72.

EPA believes the protocol is an appropriate mechanism for identifying samples for analysis by independent labs. The protocol provides an automated system to randomly identify for analysis 10% of the samples collected by an independent lab in a way that gives regulated parties no influence over the sample choice.

In addition to identifying the independent laboratory samples to be analyzed, the proposed protocol also identifies which samples must be supplied to EPA, including the minimum sample quantity to supply. The requirement to forward samples to EPA applies to both the 10% and the 100% analysis options, and, therefore, the proposed sample-shipment protocol applies to both options. Further, the regulations would instruct independent labs to send to EPA any sample that, when tested by the independent lab, is found to violate a per-gallon standard that applies to the refiner or importer.

The proposal also would specify the quantity of gasoline that independent labs would be required to supply to EPA. The batch sampling methodologies of Appendix D, in section 12.2, call for sample containers of one quart as a

minimum. Assuming that a single sample is collected in a one quart container and that the container is filled only to the minimum 70% level (Appendix D requires samples to be 70-85% full), this would provide a total of approximately 660mL of gasoline. EPA believes one-half of this quantity, or 330mL, is sufficient for a laboratory to complete all the testing requirements of the RFG regulations. Therefore, where an independent lab analyzes an RFG sample that also must be supplied to EPA, at least half the original sample volume, or 330mL, would be available for shipment to EPA. Under the proposed regulation regarding sample quantity, where the independent lab has not analyzed a sample the lab would be required to supply EPA with a one quart sample 70-85% full. In the case of a sample that has been analyzed by the independent laboratory the lab would be required to supply EPA with a minimum sample volume of 330mL.

The proposed regulations state that samples supplied to EPA should be sent to an address to be specified by EPA. This address would be the following:

United States Environmental Protection Agency  
National Vehicle and Fuel Emissions Laboratory (NVFEL)  
Fuels and Chemical Analysis Branch  
2565 Plymouth Road  
Ann Arbor, MI 48105  
(313) 668-4200

EPA is not proposing to include this address in the

regulations in order to facilitate an address change if it becomes necessary. If there is an address change for samples shipped to EPA, regulated parties would be notified through individual letters, a federal register notice, or some other appropriate means.

The second change being proposed would revise one criteria used to determine if a laboratory is "independent." Section 80.65(f)(2)(iii)(A), and proposed § 80.72(b)(2)(I), specify that in order to be considered independent a laboratory may "not be operated by any refiner or importer...." EPA now believes this independence requirement is too stringent, and should apply only in the case of refiners and importers of RFG.

Laboratories used to satisfy the independent sampling and testing requirements are required to be independent in order to increase the credibility of the laboratories' test results, as discussed at 59 FR 7765 (February 16, 1994). The independent sampling and testing requirement applies only to refiners and importers of RFG, however, and as a result EPA believes refiners and importers who operate a commercial laboratory, but who produce or import no RFG, should be allowed to serve as independent laboratories under the RFG program. EPA is proposing that this definition of "independence" would not apply if any RFG is produced or imported within a common corporate structure. Thus, if a

parent corporation has a subsidiary corporation that is a refiner or importer of RFG, no other subsidiary of that parent corporation could be considered independent.

Finally, EPA is seeking comment on whether companies that serve as independent laboratories should be made regulated parties under the RFG program.

Section 80.65(f)(3) describes the sample collection and reporting procedures, and requires that each refiner or importer shall "cause its designated independent laboratory" to carry out these procedures. Under these procedures the independent lab collects a representative sample from the RFG batch, determines the batch volume and other information about the batch, reports test results to EPA, and supplies samples to EPA upon request. A refiner or importer whose independent lab fails to properly carry out these procedures would have failed to meet the independent lab requirements, which would constitute a violation of the RFG requirements by the refiner or importer.

EPA requests comments on whether the regulations should be revised to provide that a laboratory that undertakes to act as an independent lab under the RFG program becomes responsible to properly carry out the independent lab requirements, in order to allow better monitoring and enforcement of the independent lab requirements. For example, currently there is no requirement for independent

labs to retain records, which creates potential difficulties when EPA attempts to audit and inspect independent labs.

Under this approach, where an independent lab failed to properly carry out an independent lab procedure, the independent lab would be liable for a violation of the RFG regulations. In addition, the refiner or importer for whom the lab is performing the independent lab function would have failed to meet the independent lab requirement which would constitute a violation of the RFG regulations. Under this approach, the independent lab would also be required to retain records and submit reports to EPA.

The authority to regulate laboratories that serve as an independent labs under the RFG program is based on Clean Air Act §§ 114(a), 208(a), 211(c), and 211(k). Analysis of RFG by independent laboratories is critical to enforcement of the RFG standards, for reasons that are discussed at 59 FR 7765 (February 16, 1994). In order for independent laboratory sampling and testing to serve a useful purpose, however, the independent lab must properly perform the procedures. EPA believes independent labs would be more likely to take the steps necessary to ensure the required procedures are properly performed if there were regulatory consequences that applied directly to the independent laboratory, and not just indirectly through sanctions against the refiner or importer.

The current regulations state that a lab that is debarred, suspended, or proposed for debarment pursuant to the Governmentwide Debarment and Suspension regulations cannot serve as an independent lab under the RFG program. An independent lab that fails to properly carry out the required procedures could be the subject of a suspension or debarment action by EPA. EPA requests comment on whether the suspension or debarment sanction is adequate to ensure that independent labs properly perform required procedures, in the absence of regulatory liability.

In addition, EPA requests comment on whether regulations should be proposed that would require labs to be accredited in order to carry out the RFG independent lab requirements. EPA has not previously proposed a lab accreditation requirement because of the likelihood that refiners and importers would use only labs the refiners and importers are convinced are fully capable of properly performing the independent lab requirements. However, EPA has received comments that an accreditation requirement could result in greater certainty that labs have the equipment, training, and internal procedures necessary to properly carry out the independent lab requirements, that could assist refiners and importers in selecting independent labs.

Therefore, EPA requests comments on whether lab

accreditation would be appropriate for the RFG program; whether accreditation should be performed by EPA or by an independent body, and which independent body or bodies should be considered; the accreditation criteria that would be appropriate; the estimated costs of an accreditation program; and any other considerations EPA should include as part of a lab accreditation proposal.

#### 5. Compliance Audits [§ 80.65(h) and § 80.105(c)]

EPA proposes to modify §§ 80.65(h) and 80.105(c) to make clear that the attest requirement applies separately to each refinery operated by a refiner, or the gasoline imported by an importer. The amended rules clarify EPA's intent that refiners and importers of RFG, RBOB, and conventional gasoline, and oxygenate blenders who blend RBOB and meet the oxygen standard on average, must perform a separate attest engagement for each facility at which such gasoline or product is produced. In the process of issuing the Final Rule, EPA considered and rejected the suggestion that parties be able to aggregate multiple facilities within one attest engagement. Such an aggregation would adversely skew the effect of the random sampling protocol described in § 80.127 by increasing the population of batches subject to random sampling, and by potentially spreading the samples drawn over several facilities. The effect, therefore, would

be to produce less than the 95% confidence level for each facility that the attest engagement is designed to accomplish.

6. Calculations involving previously certified gasoline [§ 80.65(i); § 80.78(a); § 80.101(e)]

Under §§ 80.65(i) and 80.101(e)(1) refiners are required to exclude from a refinery's compliance calculations gasoline that was not produced at that refinery and gasoline that was produced at that refinery but was included as part of another batch, sometimes called "previously certified gasoline," or "PCG." These requirements are included in order to prevent double counting of PCG. Section 80.101(g)(3) provides the procedure by which refiners are required to calculate the properties of blendstock that are combined with PCG to produce conventional gasoline. However, the procedure in § 80.101(g)(3) is appropriate only for the simple model anti-dumping standards, and there is no procedure specified for excluding PCG from RFG compliance calculations. As a result, EPA is proposing procedures for excluding PCG from the complex model compliance calculations for both RFG and conventional gasoline. In addition, the procedures EPA is proposing would allow refiners to use conventional gasoline to produce RFG or RBOB, and to reclassify RFG with regard to VOC control and OPRG.



The procedures EPA is proposing would require refiners to determine the volume and properties of each batch of PCG used in the refinery operation, along with the designations of the gasoline: RFG, RBOB or conventional gasoline; and for RFG, the designations relative to VOC control and OPRG. The volume and properties of each PCG batch would be reported to EPA as a negative batch using the same designations as when received by the refiner. The PCG then would be used by the refiner as another blendstock in the refinery operation, and any gasoline produced using the PCG would be sampled and tested and included in compliance calculations without regard to the PCG content. Gasoline produced using the PCG could have the same designations as the original PCG batch, or different designations. Thus, the proposed procedures would allow a refiner to reclassify conventional gasoline as RFG, or to reclassify RFG with regard to VOC control and OPRG.

Under the current regulations refiners are prohibited from reclassifying gasoline in certain ways. For example, § 80.78(a)(10) prohibits any person from reclassifying conventional gasoline as RFG. However, EPA understands that prohibitions against reclassifying gasoline, such as § 80.78(a)(1), constrain the operational flexibility for regulated parties, and that such prohibitions should be imposed only where necessary. EPA believes the PCG proposal

allows greater flexibility without compromising the environmental goals or effective enforcement of the RFG program, and the PCG proposal is appropriate for this reason.

In the case of standards that are met on average a refiner who uses PCG would meet each average standard based upon the net average properties of gasoline in the relevant averaging pool,<sup>14</sup> consisting of the positive volume and properties of all gasoline produced in that averaging pool and the negative volume and properties of all PCG in that averaging pool. In addition, each averaging pool would be required to have a net "positive" gasoline volume -- each averaging pool's volume of gasoline produced would have to be greater than the volume of PCG.

Consider, for example, Refiner A who has elected to meet the VOC emissions performance standard on average at Refinery X. In this example a batch of PCG, designated as RFG, VOC controlled for Region 1, is used to produce RFG at

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<sup>14</sup> Compliance with each average standard is based on the average property or emissions performance of the subset of the gasoline produced at a refinery that is relevant to that standard, sometimes called an "averaging pool." For example, the averaging pool for anti-dumping standards is all conventional gasoline produced during an averaging period. In addition, certain RFG standards must be separately met by more than one averaging pool. For example, under § 80.67(g) the RFG NO<sub>x</sub> emissions performance standard must be met by the averaging pool of all RFG and RBOB that is VOC controlled, and separately by the averaging pool of all RFG and RBOB that is not VOC controlled.

Refinery X. This PCG would be included as a negative batch in Refinery X's VOC emissions performance compliance calculations for the "VOC controlled for Region 1" averaging pool, regardless of whether the PCG was used to produce RFG with this or with another designation.<sup>15</sup> Refiner A nevertheless would be required to meet the VOC standard for the "VOC controlled for Region 1" averaging pool, and the net volume of gasoline in this averaging pool would have to be greater than zero.

In a case where a refiner has elected to meet a parameter or emissions performance standard on a per-gallon basis, and a batch of RFG or RBOB is produced using previously certified RFG, the value of the per-gallon standard the refiner would be required to meet for this batch would be the more stringent of: 1) the per-gallon standard that applies to the refinery under § 80.41; or 2) the value for that parameter or emissions performance for the previously certified RFG used to produce the batch. If previously certified conventional gasoline is used, however, use of this PCG would not affect the per-gallon RFG standards.

Consider again the example of Refiner A, and in this

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<sup>15</sup> EPA is proposing that a "negative" batch would be included in the "Actual Total" calculation in § 80.67(g)(1)(ii) by multiplying the " $V_i$ " term (the batch volume) times minus 1.

example Refiner A has elected to meet the benzene standard on a per-gallon basis at Refinery X. Under § 80.41(c), and in the absence of applicable survey ratchets, the benzene per-gallon standard is 1.00 volume percent (vol%). Also, in this example the batch of previously certified RFG has a benzene content of 0.85 vol%. In consequence, any RFG produced at Refinery X using any amount of this PCG would be subject to a benzene per gallon standard of the more stringent 0.85 vol%.

Any previously certified conventional gasoline used to produce RFG or conventional gasoline would be included in the compliance calculations for the gasoline produced. In addition, the previously certified conventional gasoline would be included, as a negative batch, in the refinery's anti-dumping compliance calculations.

Finally, any previously certified RFG or conventional gasoline would be included as a negative volume for purposes of calculating a refinery's compliance baseline under § 80.101(f).

The proposed approach is summarized in the following table.

Previously Certified Gasoline (PCG) Type	Gasoline Produced Type	Gasoline Produced Standards	
		Per-Gallon	Average
RFG or RBOB	RFG	<p>More stringent of:</p> <ul style="list-style-type: none"> <li>• § 80.41 per gallon standards;</li> <li>or</li> <li>• PCG properties.</li> </ul>	<ul style="list-style-type: none"> <li>• Include PCG in compliance calculations as negative batch</li> <li>• All RFG pool volumes for average standards must be positive.</li> </ul>
Conventional Gasoline (CG)	RFG or RBOB	§ 80.42 per gallon standards	<ul style="list-style-type: none"> <li>• Include PCG in CG compliance calculations as negative batch</li> <li>• CG pool volume must be positive.</li> </ul>
CG <sup>1</sup>	CG	none	(same as above)
<sup>1</sup> Includes RFG used to produce CG, because previously certified RFG may be "downgraded" to previously certified CG.			

EPA believes the approach proposed for addressing PCG

is appropriate because it would provide regulated parties with significantly additional flexibility, with no apparent risk of adverse environmental consequences. The additional flexibility would result from the ability for regulated parties to more easily use previously certified gasoline in refinery operations.

At the time the RFG regulations were promulgated EPA was concerned that the overall quality of the various gasoline pools could be degraded if refiners were able to reclassify conventional gasoline into RFG, or to reclassify certain categories of RFG into other categories. For example, if a refiner could reclassify conventional into RFG, it would be possible for a refiner to produce very "clean" conventional gasoline and include this gasoline in its anti-dumping compliance calculations, and then reclassify this same gasoline into RFG with very little or no additional blending. This would enable the refiner to meet the anti-dumping standards using gasoline that, in reality, will be used as RFG. One effect of this type of "gaming" would be to degrade the quality of the conventional gasoline pool, with consequent adverse environmental effects.

As a result of these concerns, EPA included provisions in § 80.78 that prohibit parties from combining certain categories of gasoline. For example, § 80.78(a)(10)

prohibits parties from combining RFG with conventional gasoline to produce RFG, in part in order to address the "gaming" concern described above.

However, the proposed PCG accounting procedure would allow refiners to reclassify conventional gasoline into RFG in a manner that avoids the potential for adverse environmental effects from "gaming." This is true because reclassifications using PCG may occur only at a refinery, and the PCG must be included, as a negative batch, in the refinery's compliance calculations for the gasoline pool that corresponds to the PCG's designations when first produced. Consider again the example of "gaming" involving very "clean" conventional gasoline, described above. Under the PCG proposal any of the very "clean" conventional gasoline used as PCG would have to be included in the refinery's anti-dumping compliance calculations as a negative batch, this pool would have to meet the anti-dumping standards, and the pool volume would have to be positive. This would require the refiner, in effect, to produce other conventional gasoline that is equal in quantity and quality to very "clean" conventional gasoline used as PCG, that would offset the loss of this gasoline to the conventional gasoline pool. Thus, under the proposal there would be no net change in the quality of the conventional gasoline pool.

This same logic would allow refiners to reclassify RFG with regard to VOC control and OPRG.

In the case of RFG standards that are met on a per-gallon basis, a different approach would be used to ensure no degradation in the quality of the overall RFG pool as a result of the PCG proposal, since averaging calculations are performed only where standards are met on average. The approach proposed, as discussed above, would prohibit the receiving refiner from degrading the quality of any previously certified RFG batch with regard to any standard the receiving refiner meets on a per-gallon basis, by setting the per-gallon standard at the parameter value of the PCG if it is more stringent than the normal per-gallon standard.

As a result, EPA is proposing to specifically allow refiners to change the classifications of RFG and conventional gasoline under the PCG procedures. In addition, EPA is proposing to revise the prohibitions in § 80.78 to reflect the PCG proposal. In proposed revisions to §§ 80.78(a)(5) and (7) parties would be allowed to combine RFG or RBOB with blendstock under the terms of the PCG proposal.

Under the proposed PCG procedures it would be important that any gasoline claimed as PCG actually is used in a refinery's operation -- otherwise, these procedures could



cause a degradation in gasoline quality. For example, consider a refinery that received a batch of relatively "dirty" conventional gasoline. If this gasoline is classified as PCG, is used in the production and compliance calculations of conventional gasoline, and is added to the anti-dumping compliance calculations as a negative batch, there would be no net effect of the "dirty" PCG on the refinery's overall anti-dumping compliance calculations. If, however, the refiner never used the PCG as a component for gasoline production, yet included the "dirty" PCG as a negative batch in compliance calculations, the refinery's conventional gasoline pool would appear "cleaner" than it was in reality.

As a result, EPA is proposing record keeping and attest requirements that would apply in the case of any refiner who uses the PCG option, that would include records demonstrating the storage and movement of the PCG from the time it is received at the refinery until it is used in the production of gasoline. The proposed attest procedures would require the auditor to verify that PCG was used to produce gasoline at the refinery, and that the PCG batch report to EPA is consistent with the refiner's sampling and testing of the PCG, and the PCG product transfer documents, when received at the refinery.

#### 7. Requirements for imported gasoline [§ 80.65(j)]

Section 80.65(j) "Requirements for imported gasoline," is proposed as an addition to the general requirements of § 80.65(e) to qualify import certifications. This is in response to importer and independent laboratory questions regarding certification of import cargoes. The Agency has received questions regarding where and when imported gasoline must be certified, and how to treat gasoline destined for multiple ports. The Agency has issued policy guidance in response to these questions in Reformulated Gasoline and Anti-Dumping Questions and Answers. Today's regulatory revision is somewhat more restrictive than the Reformulated Gasoline and Anti-Dumping Questions and Answers policy guidance, in that batch certification would have to comply with the U.S. Customs Service requirements for imported gasoline. The original intent of the RFG regulation was to follow the normal import industry practices as regulated by the U.S. Customs Service. Some allowances were provided in the Reformulated Gasoline and Anti-Dumping Questions and Answers guidance that may not conform with the U.S. Customs Service regulations and today's proposal reverses any changes that may have occurred.

The first requirement proposed in § 80.65(j) is that batch certification sampling be conducted at the time and place permitted under U.S. Customs Service regulations, 19

CFR § 151.42, and as specified in the new § 80.47 Sampling of reformulated and conventional gasoline, which is discussed above. Section 80.47 provides specific sampling procedures for reformulated and conventional gasoline, and refers to § 80.8 Sampling Methods for the general sampling procedures that apply.

This requirement reflects the majority of guidance provided in Reformulated Gasoline and Anti-Dumping Questions and Answers. For instance, the guidance provides that when an import vessel off-loads its cargo at more than one U.S. Customs Service port, then it must certify the cargoes off-loaded in the separate ports as different batches. The reason for this is that there is no mechanism for EPA to enforce or even to find out about possible additions to a certified batch when a vessel leaves the port where it was sampled. Today's proposal also requires separate batch certifications for separate entry ports as governed by the U.S. Customs Service regulations. However, in Reformulated Gasoline and Anti-Dumping Questions and Answers, an exception to this guidance is provided for multiple ports within a given harbor area, such as the New York City harbor area, wherein a single batch may be off-loaded at multiple Customs ports within the harbor. Today's proposal will not include this exception because it does not conform with U.S. Customs Service regulations. EPA relies on U.S. Customs

Service records for enforcement of the EPA fuels regulations. By following the Customs Service regulations EPA maximizes the usefulness of this enforcement tool. It also minimizes regulatory confusion by conforming the EPA requirements with an existing regulatory requirement of the U.S. Customs Service.

U.S. Customs Service regulations for imported petroleum products allow for sampling once an import vessel is docked and ready to off-load its cargo, although under 19 CFR § 151.42, Controls on unloading and gauging, each port director independently establishes the methods of control. As such, the protocols for sampling an import vessel could vary from port to port and could also depend on the type of import vessel (for instance, ship, barge, rail car). EPA requests comments on the requirement to follow the U.S. Customs Service procedures during batch certification. EPA will retract any conflicting guidance that remains in Reformulated Gasoline and Anti-Dumping Questions and Answers after final revisions to this regulation are promulgated.

The second and final requirement of proposed § 80.65(j) is that batch size could be no larger than a "line item," or a single item of merchandise, of an entry summary under U.S. Customs Service requirements specified at 19 CFR Part 141, Subparts D, E, and F, and Part 142, Subparts A and B. These Subparts of the Customs Service regulations specify the

documentation required for import cargoes. This documentation must differentiate merchandise by listing or invoicing items subject to different duty rates (19 CFR § 141.61(e)), and it must list or invoice items of varying commercial value separately (19 CFR 141.86). Therefore, it is EPA's understanding that the Customs Service regulations require quantities of gasoline imported on a single vessel to be distinguished on the basis of their differences in commercial values or potential for differences in commercial value. For instance, different grades (segregated in different tanks) would be entered as separate line items. Also, gasoline from different sources but of the same grade, would normally be entered as separate line items due to their potential for the separate sources not meeting the agreed upon commercial specifications. Limiting batch size to U.S. Customs Service entry "items" serves two functions: 1) it adjusts the EPA requirements to fit better with the existing regulatory standards of the U.S. Customs Service, and 2) it puts a limit on the variations of RFG property values within a batch (that could lead to inaccurate sample representation as discussed above in the preamble to § 80.47, regarding homogeneity determination).

D. Compliance on Average [§ 80.67]

1. Transfer of Oxygen and Benzene Credits

[§ 80.67(h)(1)(iv)]

Section 80.67(h)(1)(iv) permits the transfer of credits directly from the refiner, importer, or blender who generates them to the refiner, importer, or blender who uses the credits for compliance purposes. EPA has received several inquiries with regard to whether transfers within the same company are included in the language of this section. It is the Agency's intention that the refiner, importer, or blender may properly transfer legitimate credits within the company or outside of the company. As a result, EPA is proposing to modify § 80.67(h)(1)(iv) to clarify that credit transfers may be either intercompany or intracompany.

E. Compliance Survey Requirements [§ 80.68]

1. Method of Computation for Averages in Survey Series §§ 80.68(c)(9)(I)(B) and (ii)(B), (c)(10), (c)(11), (c)(12) and (c)(13)]

The RFG surveys were designed to deter and detect situations where the flexibility afforded refiners through averaging gasoline characteristics at the refinery gate (as opposed to averaging each refinery's contribution to the gasoline in a particular covered area) results in a covered area obtaining gasoline that on average differs in relevant qualities from the average gasoline quality that would occur if averaging was required separately for each covered area. The surveys are conducted by an industry association

according to a statistical sampling plan approved by EPA and involve sampling gasoline from retail outlets. If the gasoline in an area fails to meet standards set forth in the regulations for a particular parameter, the standards for that parameter are made more stringent and the number of surveys that must be conducted in the following year is increased.

Some of the gasoline characteristics evaluated by the survey are chiefly of interest because of their role in causing or contributing to ambient ozone levels. Surveys for these parameters (e.g., VOC surveys) are passed or failed based upon the average of results from a week-long survey. Other parameters (like benzene and toxics) are of concern because of their cumulative effects over a longer period of time. Surveys for these latter characteristics are passed or failed based upon the average of a year-long series of one-week surveys. This discussion is primarily concerned with how the average of such a series of one-week surveys should be computed.

Under the current regulations, determining the average for each survey series<sup>16</sup> involves computation of a simple

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<sup>16</sup> § 80.68(c)(9)(I)(B) for toxics; (10)(ii) for NO<sub>x</sub>; (11) for benzene; and (12) for oxygen.

average<sup>17</sup> of parameter values from each gasoline sample across all of the samples gathered during the year (without any consideration of which week-long survey the sample was a part). If all of the individual week-long surveys had equal sample sizes, this approach to computation would yield as good a representation of the fuel supply as the timing and distribution of the week-long surveys throughout the year permitted.<sup>18</sup> Practical considerations involved in the design and conduct of an efficient overall survey operation, though, dictate some substantial variations in sample size among the week-long surveys. One such effect, and probably the most important one, stems from the fact that high-ozone season surveys for ozone precursors must yield a confidence interval on the mean small enough to meet the precision requirements of the regulations [§80.68(c)(13)(iii)] for each individual survey. Since practical considerations dictate that surveys for the various parameters be conducted concurrently (i.e., each gasoline sample is analyzed for all

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<sup>17</sup> In the case of toxics, the computation introduces weights for the season (high-ozone season or outside of high-ozone season) since the statistical model used to compute the emissions is different in the two seasons. The weights substantially correct the overemphasis on summer that affects other non-ozone-related parameters, as discussed in the remainder of the text.

<sup>18</sup> While the design for each of the individual week-long surveys is probabilistic, a variety of considerations prevent EPA from distributing the surveys in a perfectly random manner with respect to time. The overall sampling approach for survey series thus departs, to some extent, from a purely probabilistic design.



parameters covered by the survey program), this situation results in larger-than-necessary sample sizes in the summer for non-ozone precursor parameters. Outside the summer ozone season there is no need to maintain precision standards for each individual survey, but only for the annual series of such surveys. In the interest of efficiency, the survey manager may be expected to cut back on sample sizes during these times at the beginning and end of the calendar year. As a result, the simple average substantially overrepresents summertime gasoline.

An additional reason for altering the prescribed approach to computing averages of series has to do with the weights attached to each sample to handle either lack of pre-survey information about an individual retail outlet's throughput or the situation where an outlet with unusually high throughput is located in a covered area with relatively few outlets and is consequently selected into the sample with certainty. For both situations the sample is not self-weighting and weights must be computed to properly represent the outlet's gallonage in the sample. The current approach, the simple average, requires that such weights be computed two different ways, once for the outlet's inclusion in the week-long survey for ozone-related parameters and then again for the annual average computation for non-ozone-related parameters. The latter set of weights cannot be computed

until the year's data collection is complete, leaving some uncertainty up to the end of the year as to the status of survey results in areas where throughput data are not available for most outlets. This particular problem is a characteristic of the sample design approach currently being used by the industry survey organization, but that approach or some variant of it is likely to be used in any thorough attempt to meet the survey requirements in the regulations.

Both the distortion and the difficulty in computing weights, as discussed above, can be eliminated by changing the method by which the average of each survey series is computed for a given parameter in a given RFG covered area. Instead of averaging all of the measurements on individual gasoline samples in the survey series, we are proposing the following: 1) that the measurements for each week-long survey in an area be averaged, regardless of the sample size, to create a set of means of week-long surveys, and then 2) that all of the resulting individual survey averages for the area be averaged, themselves, across all of the surveys in the series. This approach removes a significant source of distortion, simplifies calculations, and improves the representativeness of the number that we use to make the important decision on whether the gasoline in an area has passed or failed a survey series.

## 2. Clarification of Applicability of Survey Precision

#### Requirements [§ 80.68(c)(13)(iii)]

The intent of the survey precision requirements set forth in the regulations (§80.68(c)(13)(iii)) was to ensure that errors (in either direction) in survey or survey series pass/fail determinations would be unlikely. Without these requirements survey managers would be able to trade off risk of inappropriate survey failure against survey costs, and the environment would not be protected against the increased risk of errors in the other direction resulting from insufficient sampling.

Thus the precision requirements should apply to the body of data that serves as the basis of each pass/fail determination. As currently written, the regulations attach the precision requirements exclusively to individual surveys without making it clear that for certain survey parameters (for example, oxygen under the simple model) the pass/fail determination is made against a year-long series of surveys rather than against a single survey. The regulations would therefore be altered to attach the precision requirements to the appropriate body of data for each determination--to the individual survey where the parameters being evaluated are ozone-related and to the survey series for other parameters.

#### F. Downstream Oxygen Blending [§ 80.69]

1. Refiner "Hand-Blending" of RBOB [§§ 80.69(a)(2), (a)(8) and (a)(9)]

Under § 80.65(c)(1) refiners and importers are required to meet all RFG standards for RBOB, except for the oxygen standard. Under § 80.65(c)(2) the oxygen standard for RBOB is met by the oxygenate blender. Section 80.69(a)(2) requires refiners and importers to determine the non-oxygen properties of RBOB by blending the appropriate type and amount of oxygenate with a sample of the RBOB (sometimes called a "hand blend"), and testing the properties of the resulting RFG. Under § 80.69(a) an RBOB refiner or importer is allowed to hand blend the amount of oxygenate actually used by the oxygenate blender only if, inter alia, a quality assurance program is carried out over the oxygenate blending operation. In the absence of such a quality assurance program, under § 80.69(a)(8) specified types and amounts of oxygenate must be hand blended.

EPA is proposing to revise § 80.69(a)(2) to provide additional guidance regarding the type and amount of oxygenate that must be hand blended, and to move the hand blending instructions from § 80.69(a)(8) to § 80.69(a)(2) in order to improve the organization of this section. The additional guidance would apply in the case of "refiner specified" RBOB (i.e., neither "any oxygenate" nor "ether only") for which the refiner or importer has specified options for more than one oxygenate type, or for a range of oxygenate volumes. EPA is proposing that the hand blend for

such RFG must be formulated with the most conservative options. For example, where an RBOB specification allowed ethanol and other oxygenates, the hand blend would have to be formulated using ethanol, because ethanol, as compared with other oxygenates at the same weight percent oxygen, generally results in RFG with worse emissions performance.

Section 80.69(a)(9) specifies that where RBOB is designated as "refiner specified" but the quality assurance program is not completed, the hand blend must be formulated with 4.0 vol% ethanol. EPA is proposing to merge this paragraph with § 80.69(a)(2).

## 2. Deletion of Sections 80.69(a)(4) and (a)(10)

Section 80.69(a)(4) requires refiners of RBOB to determine properties of the RBOB, which would allow downstream parties to determine if any contamination had occurred and thereby ensure that the RFG produced using the RBOB would meet applicable standards. Section 80.69(a)(4) was included in the final reformulated gasoline regulation to facilitate quality assurance programs by downstream parties who handle RBOB, particularly where RBOB from a specific refinery travels as a segregated product. However, EPA believes that, in practice, most RBOB is being transported in a fungible manner. As a result, there is little value to § 80.69(a)(4) and EPA is proposing to delete this requirement. EPA believes that downstream parties may

conduct fully adequate quality assurance programs over RBOB by hand blending the oxygenate type and amount specified for the RBOB and testing the hand blended sample to determine compliance with applicable standards.

Section 80.69(a)(10) requires refiners and importers of RBOB to include in the RBOB blending specifications a range of oxygenate types and amounts for all RBOB. This requirement was included in the RFG rule because at the time the RFG regulations were promulgated it was not clear the types of RBOB regulated parties would choose to produce. As a result, the regulations were structured to accommodate a wide variety of RBOB types. In practice, however, refiners and importers of RBOB have chosen to produce only a limited slate of RBOB types, and mainly only two types: generic "ether-only" RBOB, and RBOB with blending instructions that are specific to the refiner and that is shipped in a segregated manner. As a result, EPA now believes that § 80.69(a)(10) creates a burden on refiners and importers of RBOB, yet provides little or no benefit to oxygenate blenders or to the environment. Accordingly, EPA is proposing to eliminate this requirement.

### 3. Refiner Evaluation of RFG Produced by Oxygenate Blender [§ 80.69(a)(7)]

In the case of a refiner of RBOB conducting oversight over the RFG produced at a downstream oxygen blending

facility, the refiner of the RBOB is required to calculate the non-oxygen parameter values for the RFG produced using the RBOB. To do so, the refiner may use either the oxygen blending assumptions under § 80.69(a)(2) or the actual oxygen blending levels if the refiner meets the contractual and quality assurance testing requirements specified in § 80.69(a)(5) through (7).

The quality assurance provisions of § 80.69(a)(7) require the refiner to use sampling and testing to ensure that the RFG produced by the downstream oxygen blender meets "applicable standards." The applicable standards are not further specified in that paragraph.

EPA is proposing to amend § 80.69(a)(7) to require the refiner to evaluate the RFG produced by an oxygenate blender for the oxygenate type and oxygen amount, but not for other RFG standards. The principal purpose of the § 80.69(a)(7) oversight program is to ensure that the oxygenate blender uses the proper type and amount of oxygen, to support the refiner's RBOB compliance calculations. Other sections of the regulations address quality assurance sampling and testing for all standards that apply at all downstream locations, including at oxygenate blending facilities. See, for example, § 80.79(c), which requires quality assurance sampling and testing as an affirmative defense for violations of downstream standards. As a result, EPA

believes it is most appropriate to require sampling and testing only for oxygenate type and amount under § 80.69(a)(7).

#### 4. Oxygenate Blending Instructions [§ 80.69(b)(1)]

Under § 80.69(b)(1) oxygenate blenders are required to blend with RBOB only the type and amount of oxygenate that is specified for the RBOB. EPA is proposing to amend this section to provide additional guidance to oxygenate blenders regarding this blending. In addition, EPA is proposing regulations that would specify the allowed quantity of de minimis, extraneous, oxygenates that may be present in an oxygenate blending operation.

EPA is proposing oxygenate blending requirements under § 80.69(b)(1) that are in accord with the RBOB blending instructions. In addition, EPA is proposing language that would clarify that the minimum oxygenate volume that could be used is the minimum volume specification for the RBOB, and that the oxygenate blender is free to add additional oxygenate up to the maximum oxygen standard under § 80.41(g).

EPA understands that when RBOB is blended with oxygenate to produce RFG at oxygenate blending facilities, the RFG may contain de minimis amounts of oxygenate other than the principal oxygenate that is blended. These oxygenates may result, for example, when RBOB is shipped via



pipeline adjacent to RFG (that necessarily would contain oxygenate), and these products are imperfectly segregated. Also, when an oxygenate is produced it is normal that de minimis amounts of other oxygenates also are produced and that remain present in the principal oxygenate.

EPA believes that de minimis quantities of oxygenate that are in addition to the principal oxygenate used to produce RFG do not degrade the quality of RFG beyond a trivial amount. As a result, EPA is proposing regulations that would specifically allow de minimis amounts of incidental oxygenate, and that would specify the oxygenate amounts that would be considered de minimis. However, EPA is also proposing that these incidental oxygenates could not have been intentionally blended, because the purpose of this proposed provision is to address inadvertent oxygenate anomalies and not to provide additional oxygenate blending options.

5. Every-batch Sampling and Testing Requirement for Splash Blenders [proposed § 80.69(b)(5)]

Under § 80.69(b)(4), an oxygenate blender who meets the oxygen standard on average is required to sample and test each batch of RFG produced to determine the batch's oxygen content, and assign a number to the batch for reporting purposes. This every-batch sampling and testing requirement was intended to be applied regardless of whether the

oxygenate blending is carried out in a large terminal tank or through blending in trucks (sometimes called splash blending).

Every-batch sampling and testing is required in order to give the oxygenate blender the best information with which to calculate the average oxygen content of RFG produced. EPA believes that oxygenate blenders, like other parties who produce RFG, should use adequate procedures to determine, with great certainty, the oxygen content of RBOB produced. This is particularly true of parties who meet the oxygen standard (or other standards) on average, because, in part, any errors in calculating average oxygen content could result in the transfer to other parties of invalid oxygen credits. Every-batch sampling and testing provides this certainty.

However, EPA believes that this every-batch sampling requirement adds significant difficulties in the case of oxygenate splash blenders. As a result, EPA is proposing to add § 80.69(b)(5) which would allow oxygenate splash blenders to meet the oxygen standard on average without conducting every-batch sampling and testing under certain conditions. These conditions, which are described below, would require the oxygenate blender to use procedures that give certainty about oxygen use, and that, taken together, EPA believes are as effective as every-batch sampling.

a. Computer-controlled oxygenate blending required.

Under the proposal, the oxygenate blending would have to be carried out using computer-controlled in-line or sequential blending that operates in such a manner that the volumes of oxygenate and RBOB are automatically dispensed when a particular grade of gasoline is selected for loading into a truck, and where no operator instructions are required regarding the oxygenate-RBOB proportions when an individual truck is loaded. Thus, this alternative averaging approach would not be available where the oxygenate and RBOB are separately metered into a truck, regardless of whether the separate metering occurs at the same terminal or at different terminals.

b. Oxygenate blender must operate blending equipment.

The oxygenate blender would be required to be the party who operates the computer-controlled in-line or sequential blending equipment. Thus, this alternative averaging approach would not be available to a party who receives delivery of splash blended RFG into trucks at a terminal if the terminal is not operated by that party, regardless of whether the receiving party is a registered oxygenate blender.

c. Compliance calculations. The oxygenate blender would be required to base its compliance calculations on the volumes and properties of RBOB and oxygenate used during a

period no longer than one calendar month. In calculating the oxygen content of the RFG produced, the oxygenate blender would be required to use either assumptions regarding the specific gravities of the oxygenate and RBOB blended, or the oxygenate blender would be required to measure the measured specific gravities of all oxygenate and RBOB blended in the blending operation. Similarly, with regard to the denaturant content of the ethanol (if used), an oxygenate blender would be required to use a denaturant content of 5 vol% and to support this value with documents from the ethanol supplier and a quality assurance program, or the oxygenate blender would be required to determine the denaturant content of all ethanol used through sampling and testing.

d. Quality assurance sampling and testing.

An oxygenate blender who meets the oxygen standard on average using these procedures would be required to conduct a program of quality assurance sampling and testing of the RFG produced, using the procedures and at the frequencies specified under § 80.69(e)(2).

e. Attest procedures [§§ 80.129 and 80.134]

Under § 80.65(h) any oxygenate blender who meets the oxygen standard on average is required to commission an annual attest engagement, to be conducted under the terms of subpart F. EPA is proposing to add attest procedures that

would apply in the case of an oxygenate splash blender who meets the oxygen standard on average under the proposed procedures. In addition, EPA is proposing record keeping requirements that would apply to such an oxygenate blender. The records which would be kept are those EPA believes are necessary to an EPA auditor, or an independent auditor, to ensure the proposed procedures were properly completed.

G. References to Renewable Oxygenate Requirements [§ 80.83]

On August 2, 1994, EPA promulgated regulations that would have required the use of "renewable" oxygenates to meet a portion of the oxygenate standard for RFG. See, 59 FR 39290 (August 2, 1994). However, implementation of the renewable oxygenate requirements was stayed effective September 13, 1994, as a result of a legal challenge filed in the United States Court of Appeals for the DC Circuit. See, 59 FR 60715 (November 28, 1994). The Court of Appeals ultimately held that the renewable oxygenate requirements for RFG are invalid, as they are not authorized under §§ 211(c) or (k) of the Clean Air Act. *American Petroleum Institute v. EPA*, 52 F.3rd 1113 (D.C. Cir. 1995).

This proposal would remove the regulatory language covered by that decision.

The proposed changes relating to renewable oxygenates are shown in the following table.

§ 80.2(ss)	Current paragraph is deleted because it applies only to renewable oxygenate requirements. A new paragraph (ss) is proposed which would define "tank truck."
§ 80.2(tt)	Paragraph is deleted because it applies only to renewable oxygenate requirements.
§ 80.2(uu)	Paragraph is deleted because it applies only to renewable oxygenate requirements.
§ 80.65(d) (2)(vi)(C) through (E)	Paragraphs are deleted because they apply only to renewable oxygenate requirements.
§ 80.83	Current section is deleted because it applies only to renewable oxygenate requirements. A new section 80.83 is proposed which would provide procedures for handling gasoline treated as blendstock.
§ 80.128(e) (2)	Paragraph is revised to delete language that applies only to renewable oxygenate requirements.

§ 80.128(e) (6)	Paragraph is deleted because it applies only to renewable oxygenate requirements.
§ 80.129(a)	Paragraph is revised to delete language that applies only to renewable oxygenate requirements.
§ 80.129(d) (3)(iii)	Paragraph is deleted because it applies only to renewable oxygenate requirements.

In certain cases, the deleted text is replaced by regulatory language discussed elsewhere in this proposal.

#### H. Covered Areas [§ 80.70]

Under Clean Air Act § 211(k)(10)(D), any ozone nonattainment area that is reclassified as Severe becomes an RFG covered area. This inclusion in the RFG program occurs one year following the date of reclassification.

Effective June 1, 1995, the Sacramento, California, ozone nonattainment area was reclassified from Serious to Severe (60 FR 20237 (April 25, 1995)). Sacramento, therefore, became a covered area as of June 1, 1996. Today's proposal would update the list of RFG covered areas in § 80.70 to include Sacramento.

#### I. Record Keeping Requirements [§ 80.74]

# 1. Clarification of test results record keeping

[§§ 80.74(a) and 80.104(a)]

Sections 80.74(a)(2)(iii) and 80.104(a)(2)(i) require regulated parties to keep the results of tests conducted of reformulated and conventional gasoline. Parties have asked EPA to clarify this requirement, and in particular have asked whether these regulations require parties to keep copies of all documents that contain test results.

In order to clarify these requirements, EPA is proposing changes to §§ 80.74(a)(2)(iii) and 80.104(a)(2)(i), that would specify that parties are required to keep the original result for each test performed. Thus, for example, where a test is performed using a testing apparatus that automatically generates a printed document containing the test result, this printed document must be kept. Where a test is performed using an apparatus that does not generate a print out EPA is proposing that the party would be required to keep the first recorded test result, such as the chemist's laboratory log book.

In addition, EPA is proposing that parties would be required to keep any other record that contains a test result that is not identical to the original result. A non-identical test result could occur where a party determines that an original test result is in error because of



laboratory error, for example. In such a case, the party would be required to keep both the original test result and the corrected test result. This proposed requirement would allow EPA, during the course of an audit or inspection, to review changes that are made to test results, to determine if the changes are appropriate.

## 2. Records to be Kept by Refiners and Importers

[proposed § 80.74(b)(7)]

EPA is proposing to add § 80.74(b)(7) which would require retention of records that reflect the physical movement of gasoline treated as blendstock (GTAB) from the point of importation to the point of blending to produce reformulated gasoline. (See Preamble Section V.C. concerning the proposed requirements for GTAB.)

## 3. Records to be Kept by Independent Laboratories

[proposed § 80.74(h)]

EPA is proposing to add § 80.74(h) which would require laboratories serving as independent laboratories under proposed § 80.72 to retain records as required under §§ 80.74(a)(2) and 80.72(c)(1).

## J. Product Transfer Documentation [§§ 80.77 and 80.106]

Product transfer documentation (PTD) requirements at §§ 80.77 and 80.106 are intended to insure that on each occasion that any person transfers custody or title of any

RFG, RBOB or conventional gasoline, other than when gasoline is sold or dispensed for use in motor vehicles at a retail outlet or wholesale-purchaser-consumer facility, the transferor produce, and provide to the transferee, documents that contain certain information. This information would enable the transferee to know enough about the gasoline being received to meet the requirements of the RFG program. In addition, the PTD documents, which parties are required to keep under §§ 80.74(a)(1) and 80.104(a)(2)(vi) and (vii), help EPA identify the source of any gasoline found to violate applicable standards.

EPA today is proposing to amend §§ 80.77 and 80.106 to clarify the following PTD requirements.

1. Introductory Text of §§ 80.77 and 80.106

Section 80.77 requires a transferor to provide PTDs to the transferee on each occasion involving a transfer of custody or title of RFG or RBOB. Section 80.77 does not distinguish between transfers of custody and transfers of title concerning the timing necessary for transfer of PTD information. EPA, however, believes the two situations may differ in this regard. In the case of transfers of custody, the PTD information should be transferred before, during, or immediately following the actual transfer because the transferee will have custody of the gasoline in question and must know how to handle it. However, since transfers of

title do not always involve the physical handling of the gasoline, EPA believes a transferee should have the option to rely on the custody transferee to properly handle the gasoline (e.g., where the custody transferee is a common carrier pipeline.) Therefore, in the case of title transfers, EPA believes there is little need for the required PTD information to be transferred at the time of the transfer of the product. Accordingly, EPA is proposing, in the case of title transfers, to allow up to thirty days in which to transfer the required information. EPA believes this timing would allow parties to transfer the required information using documents that are transferred as a part of normal business dealings, and as a result would ease the burden of meeting the PTD requirements.

The introductory text of § 80.77 excludes from the PTD requirements gasoline sold or dispensed for use in motor vehicles at a retail outlet or wholesale purchaser-consumer facility. Section 80.106 does not contain this exclusion, which EPA believes was an inadvertent omission when the final rule was promulgated. Accordingly, EPA is proposing to revise § 80.106 to conform to § 80.77 in this regard. EPA is also proposing to modify the introductory text of § 80.77 to clarify that this exclusion applies to gasoline sold or dispensed at a retail outlet or wholesale purchaser-

consumer facility for use by any ultimate consumer, and not only for use in motor vehicles.

In addition, EPA now believes that the PTD information is of little value when conventional gasoline is delivered to a retailer or wholesale purchaser-consumer in a conventional gasoline area. Accordingly, EPA is proposing to exclude from the PTD requirements transfers of conventional gasoline to retailers and wholesale-purchaser consumers in conventional gasoline areas. Note, however, that the PTD requirements of § 80.106 would continue to apply for all other transfers of conventional gasoline. Note also that the PTD requirements of § 80.77 for RFG and RBOB would continue to apply to all transfers of RFG and RBOB (other than when the gasoline is sold or dispensed by a retail outlet or wholesale purchaser-consumer facility for use by ultimate consumers), including transfers in which RFG is delivered to a retail outlet or wholesale purchaser-consumer.

2. Identification of the Gasoline [§ 80.77(f) and § 80.77(g)(3)].

EPA is proposing to amend § 80.77(f) to delete reference to conventional gasoline, since the requirements of § 80.77 do not apply to conventional gasoline. EPA is proposing to amend § 80.77(g)(3) to delete reference to RBOB. This section requires parties to identify whether

the product contains ethanol, and RBOB, by definition, does not contain oxygenate. In addition, EPA is proposing to add references to RBOB to §§ 80.77(c) and (f) to specify that these PTD requirements apply to RBOB as well as to RFG and conventional gasoline.

3. Elimination of PTD Requirement for Inclusion of Registration Numbers [§ 80.77(j) and § 80.106(a)(1)(vi)].

Sections 80.77(j) and 80.106(a)(1)(vi) require, in the case of transferors and transferees who are refiners, importers or oxygenate blenders, that the EPA assigned registration number of those persons be included on the PTDs. EPA received comments that this requirement is overly burdensome in certain circumstances, particularly downstream of the refiner/importer/oxygenate blender where such information may not be readily available. Based on experience with the program, EPA believes that this requirement has only limited value as a means of identifying and tracking the gasoline, and that EPA will be able to adequately enforce the regulations without inclusion of the assigned registration number on the transfer documents. As a result, EPA is proposing to eliminate the requirements to include registration numbers in PTDs.

4. Use of Product Codes [proposed § 80.77(j)].

The petroleum industry historically has used product codes to identify product type in business transactions

involving the transfer of title or custody of petroleum products. For example, all pipelines that transport refined petroleum products use codes to identify the various types of petroleum products that are transported. These product codes are well-known to persons who operate a pipeline, or who supply products to or receive products from a pipeline. These pipeline codes are used as a shorthand for the myriad petroleum products moving through the distribution system, and make product identification easier.<sup>19</sup> In addition, product codes are used to identify petroleum products in many of the documents used to memorialize transfers of title and custody in normal business dealings, in part because the codes occupy less space on the documents than the full product names would require.

EPA is proposing to add § 80.77(j) to allow the use of product codes for certain information required on PTDs to accommodate this practice, but under conditions that would ensure that the codes would satisfy the goals of the PTD requirement. In particular, EPA is proposing that product codes could be used to satisfy PTD requirements related to identifying the product type (i.e., RFG, RBOB or

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<sup>19</sup>For example, Colonial Pipeline product code A1 means: gasoline; RFG; VOC-controlled for Region 1; non-OPRG; simple model; 87 octane; benzene maximum of 1.18 vol%; oxygen minimum of 1.5 wt% and maximum of 2.7 wt%; RVP maximum of 7.4 psi; and no heavy metals.

conventional gasoline); for RFG and RBOB, the designations and minimum and maximum standards; and for RBOB, the oxygenate blending specifications. Product codes, used to meet these PTD requirements would have to fully reflect the PTD requirements. Thus, a product code that referred to "VOC controlled RFG," without more, would not meet the requirement in § 80.77(g)(1)(i) to separately identify RFG that is VOC controlled for Region 1 and Region 2. Similarly, where product codes are used to identify minimum and maximum standards, as required in § 80.77(g)(2), the product codes would have to reflect the actual numerical value for the minimum and maximum standards.

In addition, EPA is proposing that the codes would have to be standardized throughout the distribution system in which they are used, and that transferees would have to be given the information necessary to know the meaning of the product codes.

EPA is not proposing that product codes could be used to satisfy PTD requirements unrelated to product types. It is EPA's understanding that product codes used in normal business practice are limited to product types. In addition, EPA believes that other PTD information, such as the name and address of the transferor and transferee, volume of product, and date of transfer, is included in full

text in documents historically used to memorialize transfers of petroleum products.

In addition, EPA is not proposing that product codes could be used for transfers of gasoline to truck carriers, retail outlets, or wholesale purchaser-consumer facilities. EPA believes that these types of regulated parties may not be sufficiently familiar with product codes to know their full meaning. This belief is based, in part, on EPA's experience in enforcing compliance with the RFG requirements by truck carriers, retailers and wholesale users. EPA has found that in most cases where codes were used to supply required PTD information to these parties, the parties did not know the meaning of the product codes even where the gasoline supplier had previously provided the information necessary to interpret the product codes.

## **V. ENFORCEMENT**

### **A. Prohibitions [§ 80.78]**

#### **1. Clarification of Prohibitions [§ 80.78(a)(1) through (4)]**

Sections 80.78(a)(1) and (2) prohibit activities that could result in the use of non-RFG in RFG covered areas. Specifically, these sections prohibit the manufacture and marketing of gasoline represented to be RFG unless the gasoline meets the requirements for federally certified RFG, and prohibit the distribution and sale of non-RFG for use by



ultimate consumers in RFG covered areas. EPA believes, however, that the current text of § 80.78(a) should be made clearer with regard to the scope of these prohibitions. As a result, EPA is proposing to revise the introductory text of § 80.78(a)(1) and § 80.78(a)(2), to clarify these prohibitions. In addition, EPA is proposing to delete § 80.78(a)(3), since this section refers to a conventional gasoline marker and the regulations currently do not require a marker for a conventional gasoline. EPA is also proposing to revise § 80.78(a)(4) for purposes of consistency with the revised text of §§ 80.78(a)(1) and (2).

2. Addition of "Causation" of Prohibited Activities  
[§ 80.78(a)(10)]

Section 80.78(a) prohibits certain conduct on the part of parties who are engaged in gasoline industry activities such as gasoline manufacturing and selling, distributing, dispensing, supplying, storing, or transporting. Under this subsection, however, parties currently are liable for "causing" prohibited conduct only in the case of gasoline that is transported in violation of the regulations.

EPA now believes there are other situations where a party may, in fact, cause another to commit a prohibited act, and in those cases, the causing party also should be liable for the violation. For example, a distributor who delivers to a retail outlet reformulated gasoline that fails

to meet one or more standards would have caused the retailer to sell and offer for sale prohibited gasoline.

As a result, EPA is proposing that parties would be liable not only for committing prohibited actions, but also for causing another party to commit a prohibited act.

### 3. Transition from Simple Model to Complex Model in 1998

Under § 80.41(i), refiners and importers of both reformulated and conventional gasoline have the option of using either the simple model or the early complex model prior to January 1, 1998. Particularly in the case of producers of reformulated gasoline, EPA believes that most parties will elect the simple model standards. Beginning on January 1, 1998, however, refiners and importers must meet the complex model standards for all reformulated and conventional gasoline produced or imported. As a result, in January 1998, it will be necessary for parties to transition from the simple model to the complex model, yet the current regulations do not specify how regulated parties should accomplish this transition. Therefore, EPA now is proposing the manner in which this transition would occur.

Under the proposal, any gasoline produced or imported during calendar year 1997, through December 31, 1997, would be subject to the simple or early complex model standards in the same manner as during calendar years 1995 and 1996.

Thus, any simple or early complex model standards that are met on an annual average basis for 1997 would be met for all gasoline produced during calendar year 1997.

Any gasoline produced or imported beginning on January 1, 1998, would be subject to the complex model standards. Thus, conventional gasoline produced during calendar 1998 would be subject to the annual average anti-dumping complex model standards specified in § 101(b)(3), and reformulated gasoline produced during calendar 1998 would be subject to the Phase I complex model standards specified in §§ 80.41(c) and (d).

However, beginning on January 1, 1998, the gasoline located in the distribution system would be a mixture of gasoline produced to meet the simple model standards and gasoline produced to meet the complex model standards. In the case of reformulated gasoline, such a mixture may not meet certain standards that apply at downstream locations or that are evaluated under the gasoline quality surveys, i.e., the toxics and NOx emissions performance standards.<sup>20</sup> As a

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<sup>20</sup> There is no simple model NOx standard, so that a mixture of simple model and complex model gasoline could fail to meet the complex model NOx standard. Similarly, a mixture of simple and complex model gasoline could not be evaluated for compliance with either the simple model or the complex model toxics emissions performance standards.

The standards for oxygen and benzene content are the same under the simple and complex models, so that a mixture of simple and complex model reformulated gasoline could be evaluated for

result, EPA is proposing that gasoline quality surveys conducted during the period January 1, 1998, through March 31, 1998, will not include evaluation for toxics or NOx emissions performance. During this period, however, EPA would continue to enforce the complex model standards for oxygen and benzene content that apply at downstream locations, and gasoline quality surveys conducted during this period would include evaluations for oxygen and benzene content. Beginning on May 1, 1998, all applicable complex model standards would be enforced at all locations, and gasoline quality surveys would evaluate with all complex model standards.

EPA believes that the three month period, January through March 1998, would be sufficient time for parties to transition the gasoline at all locations in the distribution system from gasoline produced to meet simple model standards to gasoline produced to meet complex model standards. This transition period is similar to the time necessary to transition to the VOC-control standards each Spring; i.e., terminals are able to complete their transition to the new standard about 60 days after refiners begin producing

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compliance with these standards. The standards for VOC and NOx emissions performance are not evaluated for downstream compliance until the beginning of the high ozone season on May 1 each year, and as a result should not be affected by the transition from the simple to the complex model in early 1998.

gasoline to the new standard, and retail outlets complete their transition during the next 30 days.

4. Amount of Oxygenate Permitted to be Added to RBOB  
[§ 80.78(a)(7)]

Section 80.78(a)(7) requires that RBOB may be blended only with oxygenate of the type and amount, or within the range of amounts, specified by the refiner or importer at the time the RBOB was produced or imported. Today's proposal revises § 80.78(1)(7) to clarify that parties may add oxygenate amounts in excess of the minimum required by the refiner or importer up to the amount allowed by the oxygen maximum standard under § 80.41(g).<sup>21</sup>

5. Categories of Gasoline Use within Covered Areas  
that are Exempt from RFG Requirements [proposed  
§ 80.78(a)(11)]

Section 211(k)(5) of the Clean Air Act describes the scope of the requirement to use RFG in the reformulated gasoline covered areas:

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<sup>21</sup>The amount of oxygen added also may not exceed the maximum amount allowed under § 211(f) of the Clean Air Act. The maximum amount allowed under § 211(f) is the amount that is substantially similar to gasoline used in the motor vehicle certification process, or allowed under a waiver granted under § 211(f)(4). In 1991, EPA issued an interpretative rule increasing the maximum amount of oxygen that EPA believes is allowed under the substantially similar criteria of § 211(f) from 2.0 to 2.7 wt% oxygen. See 56 FR 5352 (February 11, 1991). Ethanol is allowed in amounts up to 10% volume pursuant to a waiver granted under § 211(f)(4). See 44 FR 20777 (April 6, 1979).

(5) PROHIBITION. -- Effective beginning January 1, 1995, each of the following shall be a violation of this section:

(A) The sale or dispensing by any person of conventional gasoline to ultimate consumers in any covered area.

....

This statutory prohibition on the sale or dispensing of conventional gasoline in RFG covered areas is not restricted to gasoline used to fuel motor vehicles, but rather applies to all gasoline sold or dispensed within an RFG covered area to any consumer, regardless of the use. The prohibition, therefore, would include gasoline sold or dispensed for uses such as in motor vehicles, boats, construction equipment, recreational vehicles, and lawn and garden equipment.

EPA is proposing to exempt parties from this prohibition in the following limited situations: gasoline used for research, development and testing purposes; aviation gasoline sold or dispensed for use in aircraft, including gasoline that has properties identical to motor vehicle gasoline that is sold or dispensed solely for use in aircraft; and gasoline sold or dispensed for use in racing vehicles.

EPA recognizes that there may be facilities located within an RFG covered area that conduct beneficial research,

development, and testing programs which require the use of conventional gasoline. Today's proposed rule, therefore, contains provisions for obtaining an exemption from the prohibitions at § 80.78(a)(1) for persons distributing, transporting, storing, selling or dispensing conventional gasoline used for research, development, and testing purposes within RFG covered areas.

To be exempted from the prohibitions at § 80.78(a)(1) for research, development or testing under today's proposed rule, the gasoline: would have to be properly identified in product transfer documents as conventional gasoline to be used only for research, development, or testing (as applicable); could not be sold to or from retail gasoline outlets; could not be sold to or from wholesale purchaser-consumer facilities unless the wholesale purchaser-consumer is associated with the research, development, or testing; and would have to be covered by an annual research notification to EPA that includes information that describes the purpose and scope of the program. EPA believes that these are the least onerous requirements for industry which also will ensure that non-RFG gasoline is used only for a legitimate research, development, and testing purpose. Parties should be aware, however, that the exemption proposed in today's rule would not exempt gasoline used for

research, development, and testing from complying with any federal conventional gasoline requirements.

Under today's proposal, any person distributing, transporting, storing, selling or dispensing aviation and racing gasoline would be required to clearly identify the gasoline as not reformulated to be exempted from the prohibitions at § 80.78(a)(1). If any of the restricted gasoline were used in a manner inconsistent with the restriction, a violation of the prohibited activity would have occurred, and any person selling, dispensing, or using the gasoline would be liable for the violation.

EPA is proposing that the racing vehicle exemption would apply only in the case of vehicles that are used exclusively as racing vehicles in races that are sanctioned by generally recognized race sanctioning bodies. In addition, the exception would apply only in the case of vehicles that do not meet the definition of "motor vehicle" under Clean Air Act § 216(2) and § 85.1703<sup>22</sup> and that are not registered or licensed for use on or operated on public roads or highways. Examples of generally recognized race

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<sup>22</sup> Under § 85.1703 a vehicle is a "motor vehicle" if it is self propelled and capable of transporting a person or materials, unless the vehicle meets one or more of the following criteria: 1) a maximum speed of not more than 25 miles per hour; 2) the absence of features customary for street use, such as a reverse gear, a differential, and required safety features; or 3) the presence of features that render the vehicle highly unsuitable for street use, such as tracks.



sanctioning bodies include the National Association for Stock Car Auto Racing, the Sports Car Club of America, the National Hot Rod Association, the American Motorcyclist Association, and the American Power Boat Association. The racing vehicle exemption applies to use of racing vehicles during practice and qualifying for, and competition in sanctioned races, and applies to motorcycles and boats used exclusively in sanctioned races.

The rationale for the proposed exemption for aviation gasoline used to fuel aircraft is based on safety considerations. Aviation gasoline must satisfy performance criteria that are relevant to the safe operation of aircraft, and this safety consideration outweighs the very limited potential for adverse environmental effects from conventional gasoline used in this manner. In addition, aircraft emissions normally would not be confined to the covered area where the aircraft is fueled, and could occur in significant part outside any RFG covered area. The rationale for the proposed exemption for racing gasoline is based on the special performance requirements for true race vehicles and the limited volumes of gasoline involved. The environmental impact from these exemptions is trivial or minimal, and the burden from refusing these exemptions is potentially significant. EPA believes the exemptions are

warranted under these limited circumstances. See Alabama Power Company v. Costle, 636 F.2d 323, 357 (D.C. Cir.1979).

Nevertheless, EPA requests comments on whether the racing vehicle exemption would cause increased air pollution in RFG covered areas that is not trivial, and if so, whether such an environmental effect would make the racing vehicle exemption inappropriate.

#### 6. Changing Service of Gasoline Storage Tanks

[§80.78(a)(12) and (13)]

Section 80.78(a) requires the segregation of several categories of gasoline. These categories include the following:

Reformulated gasoline may not be mixed with conventional gasoline and sold as reformulated gasoline.

Reformulated gasoline blendstock for oxygenate blending (RBOB) may not be mixed with reformulated gasoline or conventional gasoline, and RBOB's that have different oxygen requirements must be segregated from each other.

During the period January 1 through September 15 each year VOC-controlled reformulated gasoline that is produced using ethanol must be segregated from VOC-controlled reformulated gasoline that is

produced using any other oxygenate, including at the retail level.

Oxygenated fuels program reformulated gasoline (OPRG) must be segregated from non-OPRG designated reformulated gasoline.

These segregation requirements preclude the mixing of any amount of the gasolines that must be segregated.<sup>23</sup> Thus, if the type of gasoline stored in a tank is changed (a change in the tank's service), and the old gasoline type and the new gasoline type must be segregated, the new gasoline may not be added unless the tank is completely free of any amount of the old gasoline type.

A gasoline storage tank's service also may be changed in a manner that results in some volume of blendstocks being mixed with reformulated or conventional gasoline. For example, a storage tank's service could be changed from blendstock (e.g., natural gasoline, raffinate, naphtha) to reformulated or conventional gasoline, which would result in mixing some volume of blendstock with the reformulated or conventional gasoline. Under §§ 80.65(c), 80.78(a)(5) and 101(d)(1) a party who combines any volume of blendstock with reformulated or conventional gasoline has produced

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<sup>23</sup> Reformulated gasoline may be mixed with conventional gasoline, so long as the mixture is classified in the product transfer documents as conventional gasoline and is used only outside any reformulated gasoline covered area.

additional volume of gasoline, which constitutes refining for which the refiner must meet all standards and requirements that apply to refiners of reformulated or conventional gasoline.

EPA recognizes that when many gasoline storage tanks are pumped as low as possible a residual volume of gasoline or blendstock remains in the tank (called the tank "heel"), and in the terminal's manifolds and pipes that serve the tank. It is very difficult but not impossible to eliminate these residual volumes. As a result, EPA is proposing that in the limited situation related to changing the service of a gasoline storage tank, pipe, or manifold for legitimate business reasons that are unrelated to any goal of mixing dissimilar gasolines or blendstock, that parties would be allowed to mix products that normally must remain segregated. Under the proposal, parties changing the service of a gasoline storage tank, pipe or manifold would have to meet a number of conditions and constraints that are specified in the proposed regulations, including measures that would minimize the volumes of dissimilar gasolines that are mixed. In addition, when any mixture would be classified as reformulated gasoline the party would be required to sample and test the gasoline subsequent to mixing to show the mixture meets all applicable reformulated gasoline standards.

EPA also is proposing an additional option that would apply in the case of a transition from reformulated gasoline blendstock for oxygenate blending ("RBOB") to RFG, and vice versa, at a terminal where oxygenate is blended in trucks (splash-blended). This option would be available only in a case where the oxygenate blender is unable to meet the tank transition requirements discussed above.

This option is being proposed because in some cases the requirements for tank transition under the proposed regulatory revisions are not feasible without risk that a terminal would have to be closed during at least part of the transition period. For example, consider a terminal operator who wants to supply RFG containing MTBE during the summer VOC season, and RFG containing ethanol outside the VOC season. During the VOC season this party's storage tank would contain MTBE-based RFG, while outside the VOC season the storage tank would contain RBOB that would be splash-blended with ethanol at the terminal. As a result, the party's terminal tank would have to transition from RBOB to RFG in the spring, and from RFG to RBOB in the fall. Under the change-of-service requirements described above, in the spring the storage tank's RBOB content would have to be drawn-down to the minimum level possible through normal pumping operations before any RFG could be added to the tank. In order to meet this requirement, however, the party

may have to take the storage tank out of service if the "minimum level" is reached before new product is available to be transferred into the tank. If the terminal has limited tankage it could be unable to supply gasoline during the time the storage tank remains out of service, which could adversely affect gasoline supplies for some parties. The same difficulty could occur when transitioning from RFG to RBOB in the fall.

As a result, EPA is proposing an option that would allow a party to receive RFG in a tank containing RBOB in the Spring prior to the beginning of the VOC season, and to receive RBOB in a tank containing RFG in the Fall subsequent to the end of the VOC season. This option is intended to minimize the likelihood a party would have to take a tank out of service in order to transition product types.

Under this option, parties could have a mixture of RFG and RBOB in a storage tank during the transition period. The option would require parties to ensure that all RFG downstream standards, including the oxygen standard, are met during the transition. In particular, parties would be required to adjust the rate of splash-blended oxygenate based on sampling and testing of the RFG/RBOB mixture and the RFG produced subsequent to splash blending. In addition, the transition must occur outside the period VOC

control standards apply at the terminal -- normally May 1 through September 15 each year.

B. Liability and Defenses [§ 80.79]

1. Branded Refiner Defenses for Violations at Branded Retail Outlets Directly Supplied by the Refiner [§ 80.79(b)(2) and (3)]

Section 80.79(b)(2) specifies the affirmative defense elements that must be shown by a refiner for violations of the reformulated gasoline standards that are found at branded downstream facilities. As currently promulgated, this section addresses violations that are caused by a reseller, distributor, oxygenate blender, or carrier that is supplied by the refiner, or by a retailer or wholesale purchaser-consumer who is supplied by one of these parties. The regulation does not specifically address the case of a branded retailer or wholesale purchaser-consumer who is supplied directly by the refiner. In addition, the current regulation is silent regarding the defenses that would apply in the case of a violation occurring at a facility carrying the brand name of an importer who is not also a refiner.

EPA believes the defense provisions should address violations that occur at facilities that display the brand name of an importer that would parallel the defense elements that apply to branded refiners, as well as violations that are caused by retailers or wholesale purchaser-consumers

that are directly supplied by a refiner or importer. EPA believes that the degree of control available to importers over their branded retail outlets is the same as the degree of control available to refiners over their branded retail outlets. This control primarily is available through contractual obligations that the refiner and importer can impose on distributors and retailers who distribute or sell gasoline under the brand name. As a result, EPA is proposing modifications to § 80.79(b)(2) that would make these changes.

2. Truck Carrier Defenses [§ 80.79(c)(3); proposed § 80.2(ss); modifications to §§ 80.28(g)(1)(iii); 80.30(g)(1)(i)]

Section 80.79(b) specifies the defenses for violations of the prohibited activities under the reformulated gasoline program. Section 80.79(b)(1) states that a party, who is presumed liable for a violation, can avoid liability if it can show: (1) that it did not cause the violation, (2) the existence of appropriate product transfer documents for the gasoline in question, and (3) that it conducted an appropriate quality assurance sampling and testing program.

These defenses apply to all regulated parties, including carriers. In addition, under § 80.79(b)(1)(iii)(B) a carrier may rely on properly conducted quality assurance sampling and testing program



conducted by another party. Carrier is defined at 40 CFR § 80.2(t) as a party who stores or transports gasoline without taking title to the gasoline.

For one category of carriers - truck carriers - sampling and testing may not always be the most appropriate form of quality assurance. The purpose of a quality assurance requirement is, first and foremost, to institutionalize preventive measures as the best way to detect and avoid violations. The most typical role of truck carriers in the gasoline distribution system is to transport gasoline from a terminal to a retail outlet or wholesale consumer. Most violations caused by truck carriers result when an inappropriate type of gasoline is delivered. For example, a truck carrier would have caused a violation if gasoline designated as conventional is delivered by the carrier to a retail outlet located in a reformulated gasoline covered area. The most appropriate quality assurance for a truck carrier to implement to avoid this type of violation would be driver training on the proper types of gasoline to deliver, and management oversight of product transfer documents to ensure the proper type of gasoline has been delivered.

It is EPA's understanding that truck carriers almost always load gasoline into empty truck compartments. To the extent this is true, it would be very unlikely the carrier

could be responsible if the gasoline loaded into the truck were off-spec for a regulated standard, such as benzene or oxygen content. As a result, sampling and testing of gasoline obtained from a truck compartment would not be particularly effective for detecting violations caused by the carrier. In addition, EPA has received comments from industry regarding the practicability of drawing samples from truck compartments during the loading process, or subsequent to loading. These comments conclude that the technical aspects of collecting gasoline samples from truck compartments make such sampling difficult, but not impossible. For example, the sampler normally would be required to climb onto the top of the truck trailer in order to gain access to the compartment lid, which could be difficult particularly in adverse weather conditions.

As a result, EPA is proposing to modify the defense elements under 40 CFR § 80.79 as they pertain to truck carriers, to state that an oversight program by a truck carrier may consist of, instead of sampling and testing, a program to monitor compliance with the requirements related to gasoline transport or storage, such as a program to properly train truck drivers and review product transfer documents to ensure that the proper type of gasoline is delivered. In addition, EPA is proposing to add a definition of tank truck carrier to 40 CFR § 80.2.

EPA is not proposing a similar change to the reformulated gasoline defense provisions for carriers other than truck carriers, such as pipelines, barge operators, or for-hire terminals. EPA believes carriers in these other categories are better able to collect gasoline samples, and samples of the gasoline being transported or stored by these categories are collected for commercial reasons on a routine basis in the normal course of business. Nevertheless, EPA requests comments regarding whether the changes proposed for truck carriers should also be applied to other types of carriers.

EPA also is proposing similar changes to the defense provisions for truck carriers in the case of violations of the volatility requirements at 40 CFR § 80.28(g)(1), and violations of the diesel sulfur requirements at 40 CFR § 80.30(g)(1). The rationale for changing the volatility and diesel sulfur defense provisions for truck carriers is the same as is discussed above for reformulated gasoline.

C. Gasoline Treated as Blendstock [proposed § 80.83; minor changes to § 80.74 and § 80.104)]

Under 40 CFR §§ 80.65(c) and 80.101(d) an importer must include all imported product that meets the definition of gasoline in the importer's compliance calculations for either reformulated or conventional gasoline. If this imported gasoline is then processed by blending with

additional blendstock, the subsequent blending constitutes a refinery operation for which all refiner requirements must be met, including refinery standards, refiner sampling and testing, independent sampling and testing in the case of reformulated gasoline, record keeping, reporting, and attest engagements. Further, the reformulated gasoline or anti-dumping standards for such an operation must be met solely on the basis of the blendstocks used, and the previously imported (and previously accounted-for) gasoline may not be included. This is true regardless of whether the subsequent blending-refining is conducted by the original importer of the gasoline, or by another party.

One consequence of this requirement is that importers are not able to conduct remedial blending of imported gasoline that is deficient with regard to a specification (i.e., is "off-spec") prior to certification as reformulated or conventional gasoline. For example, consider an importer who receives a cargo of gasoline that the importer intends to import as reformulated gasoline, but that on arrival in the United States has a benzene content of 1.35 vol%, which is in excess of the maximum benzene standard of 1.30 vol%. Because this gasoline fails to meet one of the reformulated gasoline standards it cannot be imported as reformulated, and the importers only option is to import the gasoline as conventional. Moreover, the

importer cannot import the gasoline as reformulated and subsequently add blendstock to reduce the benzene content, and the gasoline cannot be imported as conventional and converted to reformulated subsequent to remedial blending. The financial consequences to an importer of downgrading a shipload of gasoline from reformulated to conventional could be significant.

This constraint on imported gasoline does not apply in the case of a refinery where gasoline is produced that is off-spec. Consider a refiner who produces a batch of reformulated or conventional gasoline and who determines that the gasoline is off-spec prior to the gasoline leaving the refinery or being fungibly mixed at the refinery. The refiner can delay designating the gasoline as a batch of RFG, reblend the batch to correct the off-spec condition, and designate the reblended gasoline as a batch for refinery compliance calculations.

EPA is proposing changes that would allow importers to treat imported conventional or reformulated gasoline as blendstocks (termed "gasoline treated as blendstock," or "GTAB") in order to conduct remedial blending of off-spec imported gasoline. An importer's ability to classify imported gasoline as GTAB would be subject to significant conditions and constraints, however, that are included in the proposed regulations. For example, the GTAB could not

be sold or transferred by the importer to another company prior to the completion of remedial blending. As a result, the company that imports the gasoline and classifies it as GTAB in its importer capacity also would be required to conduct remedial blending and report the blended gasoline in its refiner capacity. This proposed constraint is included in order to curtail any commerce in gasoline that has not been certified. EPA is concerned that in the absence of this constraint gasoline could be lost in the fungible distribution system without ever having been certified.

In addition, for standards that are based on a company's individual baseline (such as the standards for sulfur, T-90 and olefins for simple model reformulated gasoline, and all conventional gasoline standards) the company would be required each year to calculate an adjusted refinery compliance baseline for the refinery where the GTAB is used to produce gasoline. This adjusted compliance baseline would be calculated separately each calendar year averaging period when GTAB is used to produce gasoline, and would consist of the volume-weighted combination of the company's importer baseline at the GTAB volume for the year, and the refinery's individual baseline at refinery's gasoline volume exclusive of GTAB for the year. This proposed condition is intended to prevent a company with an individual refinery baseline that is less stringent than the

company's importer baseline from using the GTAB option as a device to apply the less stringent refinery baseline to imported gasoline.

EPA has previously allowed use of this GTAB option in guidance included in Reformulated Gasoline and Anti-Dumping Questions and Answers (February 6, 1995). EPA experience since this guidance was issued has been that the GTAB option has been effective in providing importers appropriate flexibility to correct off-spec imported gasoline, and that the conditions and limitations have been effective in preventing compliance difficulties.

D. Treatment of Interface and Transmix [proposed § 80.84]

When refined petroleum products are transported by pipeline the products normally are pumped sequentially, but as a continuous flow, through the pipeline. Thus, for example, the products in a pipeline may consist of the following in sequence: premium conventional gasoline, regular conventional gasoline, premium reformulated gasoline, regular reformulated gasoline, diesel fuel, number 2 heating oil, jet fuel, etc. Where there is no mechanical separation of the product types in the pipeline, and normally there is none, some mixing of adjacent product types occurs. While the magnitude of this mixing typically is small, there nevertheless is some amount of mixing.

The petroleum product in a pipeline between two surrounding batches of petroleum product that consists of a mixture of the two surrounding batches is called "interface." Where interface product consists of a mixture of gasoline and distillate (e.g., diesel fuel, heating oil, or jet fuel), the interface is called "transmix."

It is EPA's understanding that historic pipeline industry practice regarding interface has been to blend the interface mixture into the two adjoining products that created the interface. Thus, for example, half of the interface between premium and regular gasoline is blended into the premium gasoline and half into the regular gasoline - called a "fifty percent cut" or a "mid-point cut." EPA further understands that certain product types are not mixed with any other product type, such as jet fuel. As a result, for example, where there is an interface between jet fuel and heating oil, none of the interface is blended into the jet fuel, and all of the interface is blended into the heating oil -- called a "clean cut."

Lastly, EPA understands that certain types of interface mixtures cannot easily be blended into either of the adjoining products. This would be the case where interface consists of a mixture of gasoline and distillate, commonly called "transmix." EPA's understanding is that the current pipeline industry practice, when possible, is to transmit



transmix via pipeline or barge to a facility designed to separate the gasoline and distillate portions - a "transmix processing" facility. Where transmix cannot be transported to a transmix processing facility the transmix is blended into gasoline in very small amounts, typically 0.25% to 0.5% of the gasoline by volume.

Under 40 CFR § 80.78(a) parties are required to segregate certain categories of gasoline. For example, 40 CFR § 80.78(a)(10) states that "[n]o person may combine any reformulated gasoline with any conventional gasoline and sell the resulting mixture as reformulated gasoline." Thus, in order to sell gasoline as reformulated the gasoline cannot have been mixed with any conventional gasoline.

Under 40 CFR §§ 80.2(h) and (i), 80.65(a), and 80.101 the reformulated gasoline and antidumping requirements apply at any facility where gasoline is produced. Gasoline most commonly is produced at refineries where crude oil is processed into blending components, that are then combined to create gasoline. Gasoline also is produced at any other location where blendstocks are combined to create gasoline, or where blendstocks are added to gasoline to create additional gasoline volume. Moreover, EPA believes that gasoline is produced when transmix is separated into gasoline and distillate portions.

EPA now is proposing regulations that would clarify the manner in which interface product, including transmix, would be treated under the reformulated gasoline program.

The proposed regulations contain requirements for transmix processors (parties who separate transmix into diesel and gasoline), and transmix blenders (parties who blend transmix into gasoline without first separating it into diesel and gasoline). Further, the requirements for transmix processors and blenders would be different depending upon whether the gasoline produced or blended is reformulated or conventional gasoline.

Transmix processors who classify the gasoline produced as conventional would be required to exclude this transmix-based product from anti-dumping compliance calculations. If the transmix processor used blendstocks other than the transmix-based product, however, the processor would be classified as a refiner and would have to include the blendstocks (but not the transmix-based product) in anti-dumping compliance calculations for the refinery. This approach is being proposed because the gasoline portion of the transmix would have been included in the compliance calculations of the refinery that produced the gasoline, and for the transmix processor also to include the gasoline would result in double-counting. Any blendstock used in the operation normally would not previously have been accounted

for, however, and therefore would have to be included in the transmix processor's accounting.

Transmix processors who classify the gasoline produced as reformulated, in contrast, would be required to include the transmix-based product, as well as any other blendstocks used, in the reformulated gasoline compliance calculations for the refinery. This difference in treatment for reformulated gasoline produced using transmix would be appropriate because it is possible the gasoline produced would not meet all reformulated gasoline standards. This possibility is avoided if the transmix processor were required to meet all reformulated gasoline standards.

Parties would be allowed to blend transmix into conventional gasoline where certain conditions are met: 1) the transmix must result from normal pipeline operations; and 2) either there must be no means of transporting the transmix to a transmix processor via pipeline or water, or there was an historical practice of blending transmix at the facility before 1995. In addition, the rate of transmix blending would be limited to the greater of 0.25% by volume, or the demonstrated blending rate in 1994.

Parties would be allowed to blend transmix into reformulated gasoline under conditions that are more restrictive than are proposed for conventional gasoline. The transmix would be required to result from normal

pipeline operations, there could be no means of transporting the transmix to a transmix processor via pipeline or water, and the party must be unable to blend the transmix into conventional gasoline. In addition, the rate of transmix blending would be limited to a maximum of 0.25% by volume. Lastly, the party would be required to carry out a program of sampling and testing the reformulated gasoline subsequent to transmix blending to ensure the downstream standards are met, at frequencies that are included in the proposed regulations.

## **VI. ANTI-DUMPING REQUIREMENTS**

### **A. Individual Baseline Determination [§ 80.91]**

#### **1. Negligible Quantities [§§ 80.91(d)(3) and 80.91(d)(5)(iii)]**

The negligible quantities provision in § 80.91(d)(3) was written to promote simplification of baseline determination and to excuse testing in certain limited circumstances. Under this provision, if a refiner can show that a fuel component exists only in negligible quantities in a blendstock stream, testing that stream for the component in question is not required, and a value of zero is assigned to that component. The fuel components to which this provision applies are aromatics, olefins, benzene, sulfur, and oxygen content. Negligible quantities are defined as levels which fall below the minimum levels given

in §80.91(d)(3). This provision is not a requirement, but rather is an option designed to simplify baseline development for those refiners who can and choose to take advantage of it.

Although the negligible quantities provision was designed to simplify baseline determinations, some refiners questioned the use of zero values for components which existed in negligible quantities. Instead, they proposed the use of the minimum values given in the provision. Doing so would negate the original intention of the provision to simplify baseline determinations, but it would also recognize that the minimum values represent values below which the components cannot be measured accurately. Although the use of the minimum values would result in slightly dirtier (more lenient) baselines than would result with the use of zero values, EPA is proposing to revise § 80.91(d)(3) to allow the use of the minimum values in lieu of zero values at the refiner's discretion. In promulgating the negligible quantities provision, EPA determined that assuming a zero value relative to the negligible threshold values would not significantly affect emissions. The same determination applies with regard to allowing the option to use the minimum values in lieu of zero values.

The negligible quantities provision applies only to Method 3 data collection for two reasons. First, the

provision applies only to blendstocks, not finished gasoline. Since only Method 2 and 3 data are blendstock data, the provision cannot apply to Method 1 data. Second, the primary action of the negligible quantities provision is to excuse testing in certain cases. The only time a refiner must choose whether or not to do additional testing is when considering the sufficiency of its Method 3 data.

The negligible quantities provision reduces the burden placed on refiners collecting Method 3 data to satisfy the minimum data requirements. If a refiner can "show" that a fuel component exists only in negligible quantities, testing for the blendstock stream in question is not required. Instead, a refiner can assume that the level of a component is zero or, under today's proposal, the minimum value given in § 80.91(d)(3). Clearly, the showing indicates engineering judgement or past experience. A showing cannot refer to actual test data for the blendstock stream in question, because the very purpose of the negligible quantities provision is to excuse testing. Thus if a refiner has data on the stream in question, that data must be used in the determination of the baseline per §80.91(d)(1)(i)(B).

A refiner could too easily generate a fictitiously more lenient baseline if EPA allowed test data to be used as a showing of negligible quantities. Such a refiner could test

a given blendstock stream for components that are found to be essentially absent, and then lay claim to the minimum values given in the negligible quantities provision. The EPA has chosen to interpret the negligible quantities provision in a manner that is consistent with the original intent, provides additional flexibility, and yet maintains the primary goal of developing baselines which accurately represent a refiner's actual 1990 production. As a result, EPA is proposing to revise § 80.91(d)(3) to clarify that a showing under this section refers to engineering judgment or past experience and not actual test data.

One caveat on the use of actual data in the baseline determination should be clarified. If a refiner measures a blendstock stream and discovers that the measured component level of that stream is below the applicable range for the test method used, the low end of the applicable range may be substituted for the actual measured value in the baseline determination. For example, if a sulfur test method has an applicable range of 20 - 200 ppm and a blendstock stream is discovered to have a sulfur content of 11 ppm with that test method, the stream can be assumed to contain 20 ppm for the purposes of determining the baseline. Paragraph (d)(5)(iii) has been added to section 80.91 to codify this allowance.

## 2. Closely Integrated Facilities [§ 80.91(e)(1)]

Section 80.91(e)(1)(i) of the reformulated gasoline regulation provides for determination of a single set of baseline fuel parameters, upon petition and approval, for two or more facilities that are geographically proximate to each other, yet not within a single refinery gate, and whose 1990 operations were significantly interconnected in 1990. While the existing provision permits EPA to set a single baseline that would then apply for each of several refineries, it does not permit these "closely integrated facilities" to be grouped together for all compliance purposes (including registration, recordkeeping and reporting). Rather, the provision allows a single baseline to be set for each facility it represents, and sections 80.41(h) and 80.101(h) require that each refinery comply with this baseline separately, except where authorized to group refineries for compliance purposes.<sup>24</sup> Similarly, section 80.91(e)(1)(ii) permits EPA to set a single baseline for a blending facility which received 75 percent of its 1990 blendstock from a single refinery, or from one or more refineries owned by the same refiner and that are part of an aggregate baseline.

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<sup>24</sup> Combined reports may be submitted for compliance with RFG baseline-related parameters (sulfur, olefin, and T90) and anti-dumping. Other reports must be filed by each facility.



EPA is proposing to amend the RFG and anti-dumping regulations by adding section 80.91(e)(1)(iii), which would require facilities that have been determined to be "closely integrated" and granted a single baseline by EPA to demonstrate compliance with all RFG and anti-dumping requirements as if they were one facility. Furthermore, the "closely integrated" facilities would have a single registration and would file a single set of compliance reports. EPA believes that this change will reduce costs (including paperwork costs) to industry without any significant negative environmental impact.

3. Extending the Valid Range for Sulfur in  
Conventional Gasoline [§ 80.91(f)(2)(ii)]

Under the anti-dumping provisions of the final rule, refiners use their individual 1990 baselines to determine compliance with the regulations under both the simple and complex models. To comply with the anti-dumping regulations, a refiner using the complex model is subject to valid range limits for oxygen content, sulfur content, RVP, E200, E300, aromatics content, olefins content, and benzene content. All of these fuel parameters are represented in the complex model equations applicable to conventional gasoline.

Section 80.91(f)(2)(ii) allows a refiner to extend the conventional gasoline valid range for the complex model if the benzene, aromatics, or olefins values for its individual

1990 baseline fuel falls outside of the valid range specified in §80.45(f)(1)(ii). This provision was clarified in a Direct Final Rulemaking published on July 20, 1994 [59 FR 36944]. At the time of this Direct Final Rulemaking, the Agency had no reason to believe that provisions for the extension of the valid range for fuel parameters other than benzene, aromatics, and olefins on either the low or high ends were necessary. Peripheral limitations such as ASTM specifications and the volatility rule were expected to eliminate the need for valid range extensions in other cases. Since publication of the Direct Final Rule, the Agency has determined that, despite such peripheral limitations, some individual refiner baselines contained sulfur levels beyond the 1000 ppm valid range limit. According to the current regulatory requirements, such baseline fuels cannot be evaluated with the complex model. The Agency has determined that the provision for extension of the valid range limit, previously applicable only to benzene, aromatics, and olefins, should also be applicable to sulfur.

By definition, the valid range limit defines that range of values for a given fuel parameter within which the complex model is considered accurate. Extensions of the valid range limits, therefore, cannot be boundless. If the valid range limit for sulfur is extended, the refiner in

question must still be limited by a valid range to eliminate the possibility that the complex model will be used for sulfur values that are very high, which might compromise the primary objective of the anti-dumping program.

The Agency has determined that the best approach to limiting the extension of the valid range for fuel benzene, aromatics, olefins, or sulfur content is to allow target fuels to have values at least up to the baseline level. Since the baseline fuel is an "average" fuel of sorts, the Agency has also determined that refiners should be given some flexibility beyond the baseline value. For sulfur this flexibility will be fixed at a value of 50 ppm. Thus the extended valid range limit for sulfur would be equal to the individual refiner's baseline fuel value for sulfur, plus 50 ppm.

The Agency continues to believe that the valid range limits specified in § 80.45(f)(1)(ii) delineate the range of fuel parameter values beyond which the accuracy of the complex model is questionable. Thus the Agency has determined that any extension of the specified valid ranges for conventional gasoline should incorporate flat-line extrapolation. Under flat-line extrapolation, the complex model provides no emissions benefit or detriment when raising the value of sulfur above 1000 ppm. This flat-line extrapolation will apply to both the baseline fuel and any

target fuels evaluated with the complex model under the anti-dumping regulations.

B. Anti-dumping Standards [§ 80.101]

1. Application of Compliance Baselines Under the Complex Model [§ 80.101(f)(1) and (2)]

Clean Air Act section 211(k)(8), the "anti-dumping" section, requires EPA to promulgate regulations that maintain the quality of gasoline produced by each refinery, based on each refinery's 1990 gasoline quality, or "baseline." The intent of this section is to prevent refiners from shifting "dirty" blendstocks from RFG production to conventional gasoline production. This section thereby prevents the degradation in overall quality of the nation's conventional gasoline as compared to gasoline quality in 1990.

The anti-dumping regulations, at Subpart E, implement this Clean Air Act section through conventional gasoline standards that are set in relation to each refinery's 1990 baseline gasoline quality.<sup>25</sup> See, § 80.101. However, in the case of a refinery that produces a volume of gasoline during an averaging period that exceeds the refinery's 1990,

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<sup>25</sup> The discussion in this preamble section, VI.B.1, applies to importers and the gasoline imported by importers in the same way that it applies to refiners and the gasoline produced at refineries, but the text refers only to refiners and refineries for purposes of drafting economy.

or baseline, volume, § 80.101 requires that the excess volume meet anti-dumping standards that are set in relation to a baseline that reflects average U.S. gasoline quality in 1990, called the "statutory" baseline. Thus, under § 80.101(f) a refiner who operates a refinery with such excess gasoline volume during an averaging period is required to calculate a "compliance baseline" that adjusts the 1990 baseline to reflect the excess volume over 1990 levels.

The rationale for using compliance baselines is the same for both simple and complex model standards. See discussion at 57 FR 13488 (April 16, 1992). However, under § 80.101(b) compliance baselines apply only to simple model standards. EPA believes the absence of a requirement to use compliance baselines for complex model standards was an error of omission when § 80.101 was promulgated, and as a result is now proposing to require use of compliance baselines under the complex model.

EPA is not proposing to require use of compliance baselines under the optional complex model, even though the rationale for their use would apply. The optional complex model may be used only through 1997, and today's proposed changes will not become final until well into 1997. As a result, EPA believes it is not practical to apply compliance baselines to the optional complex model at this time.

Section 80.101(f) provides the methodology for calculating a refinery's compliance baseline. Under this provision, the calculation is based on a refinery's production volume of conventional gasoline, reformulated gasoline, RBOB and California gasoline. However, oxygenates that are blended downstream of a refinery and subsequently included in the refinery's compliance calculations for conventional gasoline and oxygenates added to RBOB are not currently included in the calculation. EPA now believes that such oxygenates should be included in a refinery's total annual production as it compares to its 1990 volume for the purpose of determining the refinery's compliance baseline. EPA believes this change is appropriate in order to keep the various provisions of § 80.101 consistent.

EPA also is proposing to change the organization of § 80.101(f), in order to make the requirements of this subsection clearer. This reorganization would not, in itself, change the substantive requirements of the subsection.

## 2. Elimination of the Baseline Adjustment by Refiners who also are Importers [§ 80.101(f)(3)]

Under the anti-dumping program all domestic refineries have individual baselines, while almost all imported gasoline is subject to the statutory baseline. However, § 80.101(f)(3) requires an importer who also operates one or

more refineries to use a baseline for imported gasoline that is the average of the individual refinery baselines. This requirement is intended to address a particular "gaming" concern: that a refiner who operates a refinery with a stringent refinery baseline (a baseline cleaner than the statutory baseline), would produce conventional gasoline that would be exported and thereby would be excluded from the refinery's compliance calculations, but that then would be imported under the less stringent statutory baseline.

EPA now believes the requirement at § 80.101(f)(3) may be unnecessary. There may be little risk of the form of gaming described above, in part due to the cost of transporting large volumes of gasoline out of the United States in order to be exported, and then transporting the same gasoline back into the United States in order to be imported. In addition, the current requirement provides a competitive advantage to refiner/importers who operate refineries with baselines that are dirtier than the statutory baseline. Further, EPA now believes the gaming concern could be appropriately addressed by simply prohibiting parties from exporting and then importing gasoline for the purpose of obtaining a more favorable baseline for the gasoline.

As a result, EPA is proposing to eliminate the requirement for refiner/importers to calculate a special

baseline for imported gasoline, and is proposing to substitute a requirement, as proposed § 80.101(j), that would prohibit the form of gaming described above.

### 3. Compliance Calculations for Blendstocks

[§ 80.101(g)(3)]

Under § 80.101(d)(4), and subject to certain conditions, refiners are allowed to include in a refinery's anti-dumping compliance calculations oxygenate that is added to the gasoline produced at a refinery where that oxygenate is blended at a facility downstream from the refinery.<sup>26</sup> In the case of the simple model standards, which are based only on volume-weighted parameter averages, the mechanism for including an oxygenate batch in a refinery's compliance calculations is straightforward - the oxygenate batch is included based on its volume and measured levels for sulfur, olefins, aromatics, etc.

However, in the case of the complex model's emissions performance standards the mechanism for including oxygenates in compliance calculations is less clear, because the emissions performance of an oxygenate batch cannot be directly calculated using the complex model. This difficulty results from the valid range limits of the

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<sup>26</sup> These conditions are aimed at ensuring that the oxygenate is blended with gasoline produced at the specific refinery in whose compliance calculations the oxygenate is included.



complex model -- the complex model is valid only for fuels with parameter values that are all within the valid range limits, and most oxygenates have at least some parameter values that are outside these limits. For example, pure ethanol has an RVP of 2.5 psi, which is less than the 6.4 psi minimum valid range limit for RVP.

Section 80.101(g)(3) includes a method for calculating the emissions performance of blendstocks, including oxygenates, based on the difference in emissions performance between a baseline gasoline, and the emissions performance of a hypothetical blend of baseline gasoline and an appropriate amount of the applicable blendstock. However, the § 80.101(g)(3) method is of limited use in that it only applies for refineries that only produce gasoline by adding blendstocks to finished gasoline at a single facility. It has been brought to EPA's attention that in the case of a refinery that also includes gasoline batches in its compliance calculations this method is not appropriate. <sup>27</sup>

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<sup>27</sup> Under the § 80.101(g)(3) method a refiner calculates, for each blendstock batch, the amount the emissions performance that the batch differs from the refinery's baseline; the net difference for all blendstock batches used during an averaging period must be zero. In effect, the blendstock batches constitute a separate averaging "pool" for compliance calculation purposes, that is not merged with the compliance calculations for a refinery's gasoline batches. As a result, for example, the § 80.101(g)(3) method would not allow a refiner to use the relatively "clean" emissions performance of ethanol blended with a refinery's gasoline at a downstream terminal, to help meet standards by gasoline produced at the refinery.

As a result, EPA is proposing to modify the § 80.101(g)(3) method in order that blendstock batches may be included in compliance calculations along with gasoline batches.<sup>28</sup>

Under the proposal, a refiner would first determine the volume and properties of each batch of blendstock used. This determination would require the refiner to sample and test each batch of blendstock received. However, in the case of oxygenates and butane the refiner could use these blendstocks' normal properties instead of sampling and testing each batch received, provided that the refiner completes proposed procedures, discussed in Preamble sections IV.F.5 and VI.B.8, that would confirm the purity of these blendstocks.

The refiner then would determine the blending rate of the blendstock. Where a blendstock batch is blended into multiple batches of gasoline, the refiner could use the cumulative blending rate. For example, consider a refiner

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<sup>28</sup> The proposed compliance calculation method involving previously certified gasoline (PCG), discussed in Preamble Section IV.C.6., also would be available to a conventional gasoline refiner. Under the PCG proposal a refinery's compliance would be based only on the volume and properties of blendstocks that are blended by excluding the volume and properties of PCG. However, the PCG method requires the refiner to sample and test each batch of gasoline received, and each batch of gasoline produced, which may not be feasible where oxygenate is blended at a downstream terminal.

who blends reformat into gasoline at a terminal.<sup>29</sup> If this refiner receives a batch of 25,000 gallons of reformat, and blends this blendstock with 300,000 gallons of gasoline, the blending rate would be 0.077 ( $25,000 \div 325,000 = 0.077$ ). This would be true whether the 25,000 gallons of reformat were blended with a single 300,000 gallon gasoline batch, or with six 50,000 gallon gasoline batches regardless of the individual blending rates for the six batches.

However, EPA is proposing that a blendstock batch that is used to produce some gasoline that is classified as "summer" and other gasoline that is classified as "winter" would have to be treated as two separate batches, based on the volumes of blendstock used to produce gasoline in these two "seasonal" categories. In addition, and subject to this seasonal constraint, EPA is proposing that a refiner who blends oxygenate or butane at a downstream terminal would be allowed to treat as a single batch the volume of blendstock received during a period of up to one month.

Next, the refiner would calculate the properties of a hypothetical gasoline, that would reflect the properties

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<sup>29</sup> The terminal in this situation would be classified as a "refinery" because gasoline volume is being produced through the blending of non-oxygenate blendstocks, and the refiner would be required to meet the anti-dumping standards based on the volume and properties of the blendstock used at this refinery. The gasoline used in the blending operation could not be included in compliance calculations because it would have been previously certified.

that would result if gasoline having the refinery's "summer" or "winter" baseline values, as appropriate, were blended with the blendstock at the blending rate previously determined. These properties would be the volume weighted average for each property. Although certain properties such as distillation and RVP do not blend linearly, EPA is proposing this approach as a reasonable approximation since there is no other method to more accurately attribute the emissions effect of such downstream blending operations. Consider again the example of the refiner blending 25,000 gallons of reformate into 300,000 of gasoline at a terminal. Assume the terminal-refinery is subject to the statutory baseline, that the reformate has a benzene content of 2.10 vol%, and that all of the gasoline produced using the reformate is classified as "summer." Under §§ 80.91(b)(5)(i) and 80.45(b)(2) the "summer" benzene statutory baseline is 1.53 vol%. The benzene content for the hypothetical gasoline blend ( $B_h$ ) would be calculated as 1.57 vol% using the following equation:

$$B_h = \frac{(1.53 \times 300,000) + (2.10 \times 25,000)}{300,000 + 25,000}$$

In the case of the calculated values for sulfur and oxygen, the specific gravities of the blendstock and gasoline would be included in the calculation. The measured specific gravity of the blendstock would be used. However, EPA is proposing that refiners would be required to use a specific gravity value of 0.749 for "summer" gasoline and 0.738 for "winter" gasoline, because a refiner using the proposed procedure normally would not have measured the gasoline's specific gravity.

The emissions performance of the hypothetical gasoline then would be determined using the complex model. Under the complex model, these are the exhaust toxics and NOx emissions performance, in mg/mi. Like for other compliance calculations involving the complex model, the "summer" complex model would be used for gasoline blends that are intended for use in an area subject to an EPA summertime RVP standard at a time these standards are in effect, and that has an RVP value that meets this standard. The emissions performance for all other gasoline blends would be determined using the "winter" complex model.

In addition, the refiner would determine the emissions performance of a gasoline having the refinery's baseline values, using the same complex model version -- "summer" or "winter" -- that was used to calculate the emissions performance of the hypothetical gasoline.

Finally, EPA is proposing an equation that would be used to calculate the emissions performance of the blendstock portion of the hypothetical gasoline blend, called the "equivalent emissions performance." The equivalent emissions performance values for the blendstock, together with the blendstock volume, would be included in the refinery's compliance calculations as a separate batch.

Consider again the example of the terminal-refiner using reformate, and assume the hypothetical gasoline blend, when evaluated under the summer complex model, had a NO<sub>x</sub> emissions performance of 685.6 mg/mi. Using the summer baseline emissions performance for NO<sub>x</sub> under § 80.45(b)(3) (660.0 mg/mi) and the blendstock volume fraction previously calculated (0.077), the blendstock's NO<sub>x</sub> equivalent emissions performance (EEP) would be calculated to be 353.13 mg/mi using the following equation:

$$EEP = \frac{660.0 - (685.6 * (1 - 0.077))}{0.077}$$

The refiner in this example would include in the refinery's annual NOx emissions performance compliance calculations a batch with a volume of 25,000 gallons (the blendstock volume), and a NOx emissions performance of 353.13 mg/mi.

EPA is proposing that these changes to the blendstock calculation method would be effective beginning January 1, 1998. As a result, any refiner who has elected to use the early complex model and who combines blendstock with previously certified gasoline during the 1997 averaging period would use the current calculation method in § 80.101(g)(3). EPA believes this proposed timing is appropriate because it avoids the confusion and difficulties of reporting that would result if refiners used two different calculation methods during the same averaging period.

EPA also is proposing to change the organization of § 80.101(g), in order to make the requirements of this subsection clearer. This reorganization would not, in itself, change the substantive requirements of the subsection.

## 4. Classifying Gasoline as Summer or Winter Gasoline

[Delete §§ 80.101(g)(5) and (6); proposed

§ 80.101(g)(3)(ii)]

Refiners and importers who are subject to complex model standards are required to determine the emissions performance of each batch of gasoline using the "summer" or "winter" version of the complex model, as appropriate. Sections 80.101(g)(5) and (6) currently provide instructions for classifying gasoline as either summer or winter, based on the RVP of the gasoline. Gasoline with an RVP value that is less than the value required under the volatility regulations at § 80.27 must be classified as summer gasoline, and all other gasoline must be classified as winter gasoline. No other criteria is included in the regulations.

Separate summer and winter complex models are included in the regulations in order to address the seasonal factors that influence emission levels.<sup>30</sup> As a result, the summer complex model is appropriate for determining the emissions only for gasoline used during the summer, which generally corresponds to the high ozone season, and the winter complex

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<sup>30</sup> The principal difference between the summer and the winter complex models is that the summer model includes evaporative emissions, while the winter complex model does not. Evaporative emissions largely are a function of ambient temperatures.



model is appropriate for determining the emissions only for gasoline used outside the summer. In consequence, EPA believes the criteria for classifying gasoline as summer versus winter should include the season when the gasoline is used, and not only the RVP of the gasoline.

Another issue regarding the appropriate seasonal complex model involves gasoline used outside the continental United States in areas such as Alaska, Hawaii, Puerto Rico and the Virgin Islands. Gasoline is classified as summer gasoline for baseline purposes, under § 80.91(d)(1)(i)(A)(1), only when the gasoline is "produced and intended for sale to satisfy federal summer volatility standards." The federal summer volatility standards, in § 80.27, apply only to gasoline used in the continental United States. As a result, the emissions of all gasoline used outside the continental United States were calculated using the winter complex model for baseline purposes.

The anti-dumping standards are based on a comparison of the emissions of a refinery's gasoline during an averaging period with the refinery's baseline emissions. This comparison is valid only if the same criteria are used in the baseline and in the averaging period for classifying gasoline as summer or winter.

As a result, under proposed § 80.101(g)(3)(ii), gasoline would be classified as summer gasoline only where

the gasoline both meets a federal RVP standard under § 80.27, and is intended for use in an area subject to the RVP standards during the period these standards are in effect. Thus, all gasoline produced for use in the continental United States between May 1 and September 15 each year would be classified as summer gasoline. In addition, any low RVP gasoline produced before May that is intended to "blend-down" the RVP of gasoline storage tanks in advance of the RVP season also would be classified as summer gasoline. Lastly, all gasoline produced for use outside the continental United States, where the federal RVP standards do not apply, would be classified as winter gasoline year-round.

5. Adjustment and Aggregation of Refineries that Exchange Ownership and that are Not Wholly Owned  
[§ 80.101(h)]

Section 80.101(h) provides that refiners who operate more than one refinery may aggregate their refineries for purposes of achieving compliance with the anti-dumping standards. However, the regulations include no instructions regarding whether a refiner may aggregate a refinery that is operated by more than one refiner. EPA is concerned that enforcement difficulties could result if refiners were allowed aggregation of refineries with joint owners. Consider for example, hypothetical refinery 1, that is

jointly owned by refiners A and B and hypothetical refinery 2 that is jointly owned by refiners A and C. In this example, refineries 1 and 2 are aggregated and these aggregated refineries fail to meet the anti-dumping standards. In this situation both refiners B and C could argue that the violation occurred as a result of actions that occurred at a refinery with which they were not involved and consequently should not be liable. In consequence, it would be difficult to establish the liable party in such a situation.

As a result, EPA believes that aggregation should be available only for refineries with a single person who meets the definition of "refiner" for the refinery, or where the persons who meet the definition of refiner for multiple refineries are identical, and is proposing to require this aggregation condition.

Section 80.91(f)(4) provides instructions regarding the adjustment of aggregate baselines where a refinery that is part of an aggregation is shut down or is transferred to another owner. This section provides that where an aggregated refinery is shut down or transferred the baseline is recalculated to reflect the loss of the shut down or transferred refinery, and where a refinery is acquired the acquiring refiner must make an aggregation election regarding the acquired refinery. However, there are no

parallel instructions in § 80.101(h) regarding compliance for an aggregated refinery that is shut down or transferred.

EPA believes the baseline requirements and the compliance requirements regarding aggregated refineries should be consistent. Therefore, EPA is proposing to adopt for compliance purposes the instructions in § 80.91(f)(4). In addition, EPA is proposing to require that when a refinery is transferred during the course of an averaging period that each refiner would be responsible for meeting applicable standards during the period it was the refiner for the refinery. EPA also is proposing that the aggregation election for an acquired refinery would have to be made effective at the beginning of the subsequent averaging period. This timing proposal would minimize the number of refineries that could be part of different aggregations during a single averaging period, and the confusion and enforcement difficulties that result from such a situation.

6. Elimination of Composite Sampling and the Inclusion of Sample Retention Requirements [Current § 80.101(i)(2); proposed § 80.101(i)(1)(iii)]

Section 80.101(i), in general, requires that refiners and importers sample and test every batch of conventional gasoline, and under certain circumstances blendstocks used to produce conventional gasoline, for the purpose of

demonstrating compliance with the requirements of this subpart. For the purpose of meeting this requirement, refiners and importers currently may combine samples from more than one batch of gasoline for testing purposes in accordance with the specified protocols under § 80.101(i)(2). It was EPA's initial belief that since this procedure was permitted for the development of baseline data, it would be appropriate for demonstrating compliance.

EPA now is concerned that composite sampling may not provide the accurate results necessary for measuring compliance by refiners and importers under the anti-dumping program, and may also pose significant risk with regard to the enforcement and assurance of compliance. EPA's primary concern is that the accuracy of composite sampling relies on accurate volumetric proportioning and blending of individual batch samples. Since these normally will be relatively small volumes of gasoline, there is a substantial potential for inaccurate proportioning and blending. For example, one refiner commented to the Agency that the current compositing option has the potential for causing inconsistent lab results. EPA now believes this is a difficult process to complete accurately. Equally significant is EPA's concern that the volume fractions can readily be altered, either intentionally or inadvertently, with little or no backup means for EPA to detect or verify such alterations. Such

alterations would render the reported analyses invalid thus providing little or no assurance of compliance with this subpart by regulated parties.

Further, compositing of samples has the potential to expand the effect of any errors in formulating or testing a composite sample. Compliance with the conventional gasoline standards is calculated using sample test results weighted for the volume of gasoline represented by the sample. As a result, any incorrect test result for a composite sample would apply to the entire volume of gasoline represented by the composite sample, which could be all gasoline produced during a month, and not just to the volume of a single gasoline batch.

For the above reasons, EPA believes that composite sampling and analysis as provided under § 80.101(i)(2) is inappropriate. Therefore, EPA is proposing to eliminate the sample compositing option under § 80.101(i)(2). EPA's objective in this proposal is to provide certainty of the accuracy of reports of conventional gasoline quality that generally are comparable to the certainty that results from per batch testing. EPA seeks comments on the cost of this proposal and other options that would achieve this objective at a reduced burden to regulated parties.

One alternative option would be to require every-batch testing for certain parameters, and to allow parties to use

composite samples for other parameters. In order to evaluate this alternative option, EPA seeks comments on which parameters parties normally test on an every batch basis, whether for operational or commercial purposes. In addition, EPA requests comment on any cost savings that would result from this option as compared to testing all parameters for every batch.

Another alternative option would allow compositing, but with a cap on the volume of gasoline that could be included in any composite sample. The objective of this alternative option would be to mitigate the cost of sampling and testing for refiners, typically small refiners, who produce a large number of very small batches. As a result, the volume cap could be set at the typical batch size for a typical refinery. EPA requests comment on the magnitude of the volume cap that would be appropriate under this alternative option, and on the cost savings that would result from this option as compared to every-batch testing.

In addition, EPA is concerned that since there is no independent verification of the accuracy of test results of individual batches of gasoline, EPA has a very limited ability to monitor compliance with the conventional gasoline requirements. Although the independent sampling and testing requirement of the reformulated gasoline program is critical to ensuring compliance with the stringent RFG standards, the

same requirement may be excessive for the anti-dumping program. However, EPA believes some limited ability to verify the accuracy of sample analysis results is appropriate as a means of encouraging quality control and monitoring compliance as a deterrent to cheating.

Therefore, EPA is proposing a new requirement under § 80.101(i)(1)(iii) that refiners and importers retain samples from each batch of conventional gasoline produced or imported for a period of 30 days and provide such samples to EPA upon request. EPA would plan to periodically request samples from individual refiners, either on a random basis or when it has reason to be suspect, in order to perform its own gasoline quality analyses. This requirement would apply to conventional gasoline, gasoline blendstocks that become conventional gasoline solely upon the addition of oxygenate and blendstocks required for compliance calculations purposes under § 80.102(e)(2). The sample retention requirement would not apply to oxygenates blended downstream of the refinery or import facility. The Agency believes that refiners and importers often retain samples for some period for their own internal quality control purposes and, as a result, this requirement will not create a significantly increased burden for the industry. EPA seeks comments on the cost or other impacts of this proposal. In addition, EPA seeks comment on the cost savings that would



result if the required retention period were reduced to 15 days.

EPA recognizes that some refiners blend conventional gasoline "in-line" and ship directly to the pipeline without transferring completed batches to a storage tank. In this case, sampling in-line using a "compositing" methodology as the batch is being produced is the only practical means to obtain a representative sample from such batches. Today's proposal to eliminate composite sampling of multiple batches would allow continued use of in-line blend compositing within a batch. Further, EPA does not intend to establish any formal means of petitioning for conventional gasoline in-line blending as currently exists for reformulated gasoline blending. Therefore, EPA believes that refiners that blend in-line, without transferring the final blend to a storage tank, should continue to composite in-line provided they do so in accordance with the industry established automatic sampling procedures established by ASTM D 4177-95, "Standard Practice for Automatic Sampling of Petroleum and Petroleum Products". The manual compositing of samples from an in-line blender creates the same quality and compliance concerns discussed earlier. Further, EPA believes the automatic sampling requirements proposed under § 80.8(b), and as referenced in proposed § 80.47 and revised § 80.101, already establish the procedures required for

refiners in order to continue in-line blending of conventional gasoline.

One of the issues surrounding the elimination of compositing as a method for compliance verification by conventional gasoline producers is the cost of the additional testing. EPA recognizes that the cost of meeting the additional testing requirements by using an outside laboratory may pose a significant expense for some refineries and, therefore, it would be preferable if refiners could meet their testing requirements internally. Based on the results of recent refinery compliance monitoring since the beginning of the RFG/Anti-dumping program, EPA believes that most refiners have equipment required to perform the regulatory tests at their refinery except for sulfur under the current regulatory test method ASTM D 2622. In an effort to minimize the potential cost of the additional testing required through the proposed elimination of sample compositing, EPA examined cost effective alternative test methods to ASTM D 2622 available for determining sulfur content in conventional gasoline. EPA has observed data that suggests that ASTM D 5453-93 ("Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels and Oils by Ultraviolet Fluorescence"), when properly calibrated and correlated to ASTM D 2622, can be used on gasoline samples containing

sulfur in the range typical of commercial gasoline. EPA is, therefore, proposing that ASTM D 5453-93 be allowed as an alternative test method for determining sulfur content in conventional gasoline only until September 1, 1998. This date is being proposed based on EPA's anticipated completion of a performance based test method rulemaking as discussed at 61 FR 58305, November 13, 1996. EPA requests comment on the cost of this equipment and whether this method provides sulfur test results comparable to the current regulatory method.

7. Imports of Gasoline from Canada by Truck

[§ 80.101(i)(3)]

Under 40 CFR §§ 80.65 (b) and (c), and 80.101(d) and (i), the requirements that apply to imported gasoline apply to each batch of imported gasoline regardless of the mode of transportation. The requirements for each batch include sampling and testing, independent sampling and testing for reformulated gasoline, record keeping, reporting and attest engagements. Thus, an importer who imports gasoline into the United States by truck is required to meet these requirements, including sampling and testing, for each gasoline batch, and in such a situation a batch would consist of the gasoline contained in the truck if homogeneous or in each truck compartment if the truck's gasoline is not homogeneous.

EPA understands that the every-batch requirements may be difficult to meet when gasoline is imported by truck, because of the relatively small batch volumes. As a result, EPA is proposing a limited alternative method by which certain importers could meet the requirements for conventional gasoline that is imported into the United States via truck. This proposed approach would be limited to imported conventional gasoline, and would not apply in the case of imported reformulated gasoline, because of the additional level of environmental concern associated with reformulated gasoline.

This proposed approach would be based on the importer meeting the conventional gasoline standards on a per-gallon basis, which is different than the normal approach of meeting conventional gasoline standards on average. Per-gallon compliance is being proposed because under this proposal the importer would not be required to sample and test each truck load -- each batch -- of imported gasoline, which is necessary in order to demonstrate compliance with a standard on average. Rather, the importer would be allowed to rely on sampling and testing conducted by the operator of the truck loading terminal in Canada or Mexico to verify that the gasoline meets all conventional gasoline standards that apply to the importer.

For example, if an importer's gasoline is subject to the statutory baseline set out at § 80.91(c)(5), under the simple model the standards for imported conventional gasoline, specified at § 80.101(b)(1), are the following: sulfur - 422.5 ppm; T90 - 415 °F; olefins - 13.5 vol%; and exhaust benzene emissions - 6.45. Under § 80.101(a) these conventional gasoline standards are met on average over each calendar year averaging period. If this importer elected to import gasoline via truck under the proposed approach, however, the importer would be required to demonstrate that each gallon of this gasoline met each of these standards. The environmental consequences of this proposal would be neutral, because by meeting the average standard on an every-gallon basis the standard also is being met on average.

The proposal also includes the means by which the importer would be required to demonstrate the gasoline meets the applicable standards on an every-gallon basis. The gasoline in the storage tank from which the importer's trucks are loaded would have to be sampled and tested subsequent to each receipt of gasoline, and these tests would have to show the gasoline meets the applicable standards. This sampling and testing could be conducted by the terminal operator. For each truck load of imported gasoline the importer would have to obtain from the terminal

operator documents that state the properties of the gasoline. The importer then would treat each truck load of imported conventional gasoline as a separate batch for purposes of the record keeping and reporting requirements.

The terminal operator in most cases would not be subject to United States laws, so the proposal contains safeguards that are intended to ensure the gasoline in fact meets the applicable standards. First, the importer would be required to conduct an independent program of quality assurance sampling and testing of the gasoline dispensed to the importer. This sampling and testing would have to be at a rate specified in the proposed regulations, and the sampling would have to be unannounced to the terminal operator. In addition, EPA inspectors would have to be given access to conduct inspections at the truck loading terminal and at any laboratory where samples collected pursuant to this proposed approach are analyzed. These inspections could be unannounced, and would include sampling and testing, and record reviews.

EPA previously has allowed conventional gasoline to be imported by truck in a manner that essentially is identical to the option now being proposed, in guidance included in Reformulated Gasoline and Anti-Dumping Questions and Answers (October 29, 1994). EPA's experience since this guidance was issued has been that the approach facilitates imports of

conventional gasoline by truck, and that the sampling and testing requirements are appropriate enforcement safeguards.

EPA requests comment on this proposed approach for parties who import conventional gasoline via truck. In particular, EPA requests comment of the proposed provisions that deal with requirements that apply to persons located outside the United States, and to the need for EPA inspectors to conduct inspections at terminals located outside the United States.

8. Butane Blending Issue [§ 80.101(i)(4)]

The addition of blendstock, including butane, to reformulated or conventional gasoline constitutes the production of gasoline, with the result that such a blender is considered a refiner under the reformulated and conventional gasoline regulations, who is subject to all standards and requirements that apply to refiners. These requirements include meeting the standards applicable to reformulated and conventional gasoline, sampling and testing, record keeping, and reporting. Under §§ 80.65(i) and 80.101(e)(1) the reformulated or conventional gasoline with which the blendstock is blended must be excluded from the blender-refiner's compliance calculations. In effect, the reformulated and conventional gasoline standards must be met based on the blendstock properties alone. Under § 80.101(i)(1)(i), refiners who produce conventional

gasoline by combining blendstock with previously-certified conventional gasoline may determine compliance with the anti-dumping standards by sampling and testing the blendstock following each receipt of blendstock.

EPA understands that butane is a blendstock that historically has been blended with gasoline, particularly in the wintertime. This butane blending occurs in part because butane increases the volatility of gasoline, and the commercial specifications for wintertime gasoline allows (or requires) higher volatility levels than for summertime gasoline. In addition, there are economic reasons for blending butane, because butane generally costs less than gasoline. Butane generally is not blended with gasoline that will be used during the high ozone season (May 1 through September 15), because the increased volatility of gasoline blended with butane could violate the federal or state volatility standards that apply during that period.

EPA understands that a significant impediment to blending butane into gasoline outside the high ozone season is the requirement that refiners must sample each batch of conventional or reformulated gasoline produced, or in the case of conventional gasoline sampling each batch of blendstock. This sampling requirement interferes with butane blending because butane typically arrives at blend terminals, and is blended in relatively small quantities.



As a result, a butane blending operation would be required to sample at a frequency that could be restrictive for some parties.

In the case of butane blending into conventional gasoline that occurs outside the high ozone season, EPA believes there may be little adverse environmental impact provided that the butane is of sufficient purity, and that much of the butane used for blending with gasoline is of such purity. However, ozone is of environmental concern during the "shoulder" periods immediately preceding and immediately following the high ozone season, and the increased RVP from butane that is blended during the shoulder periods may cause adverse environmental impacts particularly in ozone non-attainment areas.

Nevertheless, EPA is proposing an alternative sampling and testing option that would be available to parties who blend butane into conventional gasoline that is used outside the high ozone season. Under this proposed option a party who blends butane into conventional gasoline would continue to be classified as a refiner, and would be liable for all refiner requirements. However, the blender would have an additional sampling and testing option. The blender-refiner would be able to demonstrate compliance with the conventional gasoline standards on the basis of the butane specifications provided by the butane supplier, subject to

certain conditions that are specified in the proposed regulations.

EPA is not proposing that parties who blend butane into RFG would be able to use this relaxed approach to sampling and testing because of concern for adverse environmental impacts during the shoulder periods. If butane blending with RFG were made more convenient, as is proposed for conventional gasoline, an increase in the volatility of RFG during the high ozone season's shoulder periods could result.

EPA requests comment on the potential for adverse environmental effects from butane blending with conventional gasoline during the shoulder periods, particularly at terminals serving non-RFG ozone non-attainment areas, and whether any such potential would be reason for EPA to decline to promulgate the proposed regulatory changes to facilitate butane blending with conventional gasoline. In particular, EPA requests comment on whether the flexibility for butane blending with conventional gasoline should be limited to terminals serving areas that are in attainment for ozone, which would be consistent with the decision to not propose change to facilitate butane blending with RFG. In addition, EPA requests comment on whether butane blending with conventional gasoline should be facilitated only during a period that is outside the high ozone season plus a

shoulder period -- for example, between October 15 through March 31 each year.

EPA previously has allowed butane blending in a manner that essentially is identical to the option now being proposed, in guidance included in Reformulated Gasoline and Anti-Dumping Questions and Answers (October 3, 1994). EPA's experience since this guidance was issued has been that the approach facilitates butane blending with conventional gasoline, and that certification mechanisms are appropriate.

EPA requests comment on this proposal to relax the sampling and testing associated with blending butane with conventional gasoline. In addition, EPA requests comment on the proposal that this additional flexibility not be extended to butane blending with reformulated gasoline.

C. Controls Applicable to Blendstocks [§ 80.102]

Under the anti-dumping program refiners are required to track the volume of certain blendstocks produced and transferred to others and to include blendstocks in their compliance calculations if the blendstock volume exceeds certain thresholds. The purpose of these blendstock requirements is to prevent a particular form of "gaming": transferring blendstock produced at a refinery with a baseline more stringent than the statutory baseline to a refinery with the statutory baseline to be blended into gasoline in order that the blendstock would be subject to

more lenient standards. See the discussion at 59 FR 7801 (February 16, 1994).

As a result of comments received from industry since the anti-dumping program began, EPA now is proposing several modifications to the blendstock tracking and accounting requirements.

1. Blendstock Tracking for Refineries with the Statutory Baseline [§ 80.102(f)(1)(i)]

Section 80.102(f)(1)(i) exempts a refinery with a baseline less stringent than the statutory baseline from blendstock tracking. However, the form of gaming that is the focus of blendstock tracking also is not possible in the case of a refinery with a baseline that is equal to the statutory baseline, and EPA believes the omission of such refineries from the § 80.102(f)(1)(i) exemption was an error at the time this section was promulgated. As a result, EPA is proposing to add refineries with the statutory baseline to the § 80.102(f)(1)(i) exemption.

2. Products that may be Excluded from the Blendstock Tracking Requirements [§ 80.102(a)].

Categories of blendstock that are unlikely to be involved in the blendstock gaming scenario are exempt from the blendstock tracking requirements. Thus, for example, the list of applicable blendstocks that must be tracked under § 80.102(a) is limited to blendstocks that adversely

impact air quality; § 80.102(d)(3) excludes from blendstock tracking those blendstocks that are not likely to be used for conventional gasoline blending; and § 80.102(f) exempts certain parties with limited blendstock production volume from blendstock accounting.

EPA now believes that the blendstock tracking requirements could be further limited without jeopardizing the environmental purpose of this section. The proposed changes relate to petroleum products that would be unlikely candidates for conventional gasoline blending. EPA believes that petroleum products with an initial boiling point less than 75 °F or an end point greater than 450 °F are not suitable for gasoline blending and, therefore, could be excluded from the category of blendstocks that refiners must track. As a result, EPA is proposing to exclude products with these boiling ranges from blendstock tracking.

EPA also now believes that certain highly refined or pure grade petroleum products are unlikely to be used for gasoline blending, and that these products can be identified by price or tendered volume. For example, EPA believes that where a petroleum product is sold at a price that is 100% above the market price of regular conventional gasoline it is unlikely the purchaser will use the product for blending gasoline. Similarly, EPA believes that products tendered in volumes less than 1,000 gallons are unlikely to be used in

gasoline blending. Therefore, EPA is proposing to exempt products that meet either of these criteria from the blendstock tracking requirements. Further, blendstocks for which the refiner has evidence are used to produce RFG need not be included in the ratio calculations. EPA is proposing that such products also be excluded under § 80.102(d)(3).

3. Inclusion of Products in the Blendstock to Gasoline Ratio Calculations [§ 80.102(d)(1) and (2)].

As discussed previously under the compliance baseline calculations, oxygenates added to either conventional gasoline or RBOB had been previously excluded from such calculations. EPA now believes such products are significant to the total volume considerations of a refiner and for consistency should be included in the blendstock to gasoline ratio calculations as well. EPA, therefore, is proposing in §§ 80.102(d)(1) and (2) that oxygenates blended downstream into conventional gasoline under § 80.101(d)(4)(ii) and oxygenates added to RBOB, as determined under § 80.65(e)(1)(ii), be included in the denominator of the compliance year ratio calculations.

4. Exclusion of Products from the Blendstock Accounting Requirements [§ 80.102(d)(3)]

Section 80.102(d)(3) exempts certain categories of petroleum products from the blendstock tracking requirements, where the product's use makes blendstock

tracking inappropriate. For example, petroleum products are exempt from blendstock tracking if the products are exported, are used as a refinery feedstock, or are transferred between aggregated refineries. Under § 80.102(e) a party that has exceeded certain blendstock volume thresholds is required to include all blendstocks in its compliance calculations, and the exemptions under § 80.102(d)(3) are not applied.

EPA now believes the exemptions in § 80.102(d)(3) also should apply to the blendstock accounting requirements, under the same rationale that justifies these exclusion under blendstock tracking, and is proposing this change to the blendstock accounting requirements under § 80.102(e).

5. Attest Engagements Involving Aggregated Refineries  
[§ 80.102 introductory text and §§ 80.102(b) and (c);  
Subpart F]

Section 80.101(h)(2)(iii) states that the aggregation election applies to the blendstock tracking requirements, and § 80.102(d)(3)(iv) exempts from blendstock tracking the blendstocks that are transferred between aggregated refineries. However, EPA believes that for purposes of conducting attest engagements under subpart F, the attest engagements should be conducted separately for each refinery, but this refinery-specific approach to blendstock

tracking attest procedures is not clear in § 80.102 or in Subpart F.

The attest requirements are organized around individual refineries, and it would create unnecessary complications to require a different organization only for the purpose of reviewing compliance with the blendstock tracking requirements. As a result, EPA is proposing to clarify the attest procedures in Subpart F to clarify that blendstock tracking attest procedures must be conducted separately for each refinery. In the case of aggregated refineries the blendstock tracking attest procedures would be separately performed for each refinery, taking into account the blendstock transfers to refineries in the same aggregation. If each refinery in an aggregation separately satisfies the blendstock tracking requirements, then EPA believes the aggregated refineries would have satisfied these requirements overall.

D. Record Keeping Requirements [§ 80.104]

EPA is proposing to modify § 80.104 to clarify that batch information must be kept for oxygenate blended downstream of a refinery where the oxygenate is included in the refinery's compliance calculations.

In addition, EPA is proposing record keeping requirements that would apply in the case of imported GTAB, that would reflect the physical movement of GTAB to the



point of blending to produce gasoline. (See Preamble Section V.C. concerning requirements for GTAB generally.)

E. Reporting Requirements [§ 80.105]

1. Modification of Information that Must be Reported  
(§ 80.105(a)(5)(iv))

Section 80.105 requires refiners and importers to report various information regarding each batch of conventional gasoline produced or imported during the averaging period. This includes the grade of the gasoline produced. § 80.105(a)(5)(iv). EPA now believes it is unnecessary to include this grade information in reports to EPA, and is proposing to eliminate this reporting requirement.

In addition, EPA now believes that in the case of ethanol batches it is unnecessary to include the ethanol properties in the batch report to EPA, because the properties of a pure compound, such as ethanol, are known. Therefore, EPA is proposing to eliminate the requirement that parties report the properties of ethanol.

## 2. Date for Submission of Attest Engagement Reports

[§ 80.105(c)]

Section 80.105(c) requires that attest engagement reports involving conventional gasoline must be submitted by May 30 each year. However, § 80.75(m) requires that attest engagement reports for RFG must be submitted by May 31 each year. This inconsistency in reporting deadlines was inadvertent when these sections were promulgated, and, as a result, EPA is proposing to conform the dates by adopting May 31 as the deadline for submitting conventional gasoline attest reports.

## **VII. Attest Engagements**

Under §§ 80.65(h), 80.75(m), and 80.105(c) refiners and importers, and reformulated gasoline oxygenate blenders who achieve compliance on average, are required to commission an audit each year to review compliance with certain requirements of the reformulated gasoline and anti-dumping program. The audit requirements are specified in 40 CFR Part 80, subpart F. Under these regulations the auditor evaluates compliance with the specified requirements by completing audit procedures, called "agreed upon procedures," that are included in the regulations for each requirement -- the auditor "attests" to the results of the agreed upon procedures. As a result, the overall audit is called an "attest engagement."

EPA now is proposing a number of changes to the attest engagement requirements.

1. Modified Agreed Upon Procedures [§§ 80.128 and 80.129; proposed §§ 80.133 and 80.134)]

The agreed upon procedures for refiners and importers are specified in § 80.128, and for oxygenate blenders in § 80.129. In addition, the headnotes of § 80.128 allow parties to satisfy the attest engagement requirement using other agreed upon procedures if the party obtains prior approval from EPA.

EPA received comments from industry, and from auditors who conducted attest engagements under this program, that the agreed upon procedures in §§ 80.128 and 80.129 should be modified in order to be more efficient. Moreover, a group of auditors who were working in this area convened under the auspices of the American Institute of Certified Public Accountants (AICPA) to develop new attest procedures. This group submitted modified attest procedures to EPA in January 1996, and asked EPA to approve these procedures for use. On March 15, 1996, EPA approved use of the attest procedures AICPA submitted, with certain modifications, under the authority of § 80.128. EPA now is proposing to include these modified attest procedures in the regulations.

The modified attest procedures do not differ significantly in substance from the procedures in §§ 80.128

and 80.129. The principal difference between the modified attest procedures and the procedures in §§ 80.128 and 80.129 is that the modified procedures includes criteria for identifying when certain attest procedures, or categories of attest procedures, are unnecessary for a particular attest engagement. For example, attest procedures address the blendstock tracking requirements under § 80.102. Under § 80.128, the auditor is required to complete a full slate of attest procedures that scrutinize each category of blendstocks relevant to the § 80.102 requirements. Under the modified attest procedures for blendstock tracking, however, the procedures are arranged in a sequence that allows the auditor to identify categories of blendstock tracking attest procedures that are unnecessary, and to avoid conducting these procedures.

These modified attest procedures were used successfully by numerous auditors for attest engagements for the 1995 reporting period.

The modified attest procedures also include definitions not included in the original procedures, but these definitions do not change the substance of the original procedures. However, in today's version of the modified attest procedures, EPA is proposing a new definition for "laboratory analysis" that would constitute a substantive change.

Under both the original and modified attest procedures, auditors are required to review laboratory analysis results of various types, and, inter alia, compare the results with reports to EPA. The form of the laboratory analysis results that an auditor must review has not been specified, however. EPA has learned that, as a result, auditors often review only a company's laboratory analysis results as transcribed into the computer system used to calculate compliance with standards. EPA has found through its own audits of refiners and importers, however, that the original laboratory results and the results recorded in a computer system sometimes are different. These differences often result from simple data entry errors, although on occasion the reason for the difference is less benign. As a result, EPA is proposing that where attest procedures call for the review of a laboratory analysis result, the auditor would be required to review the original laboratory result. Thus, for example, in the case of a testing apparatus that generates a printout of the test results, only review of this printout would satisfy an attest procedure that calls for review of the laboratory result, or where test results are first recorded in the chemist's laboratory log book, only review of this log book would satisfy the requirement. Review of a transcribed version of these original test results would not suffice.

This proposed definition of laboratory analysis is consistent with the proposed change to the record keeping requirement dealing with laboratory analyses, discussed above, that requires parties to keep copies of original test results.

EPA is proposing that the original attest procedures in §§ 80.128 and 80.129 would continue to be available as alternatives to the attest procedures now being proposed, but only through the attest for the 1997 reporting period. Under this proposal, only the attest procedures in proposed §§ 80.133 and 80.134 could be used to meet the attest engagement requirements beginning with the attest engagements for the 1998 reporting period.

EPA is proposing to phase out the original attest procedures because we believe the modified attest procedures are superior, and ultimately should be used for all attest engagements. In addition, EPA believes oversight of the attest requirement, including reviews of attest reports, would be more efficient if all attest engagements were based on the same agreed upon procedures. Nevertheless, EPA requests comment on whether the original attest procedures should be available for use indefinitely.

In addition, EPA is proposing that during the period when both the original and the modified attest procedures are available parties would be required to use either the

original attest procedures for refiners and importers under § 80.128 in its entirety, or the modified attest procedures for refiners and importers under § 80.133 in its entirety. A party would not be allowed to use a mixture of attest procedures from § 80.128 and § 80.133. Similarly, an oxygenate blender would be required to use the attest procedures in § 80.129 or in § 80.134, and could mix attest procedures from both sections. The reason for this constraint is that the different attest procedure sections contain different requirements that are organized differently, and, at least in part, the logic of the sections would be lost if these sections are not completed in their entirety.

## 2. Agreed upon procedure reports [§ 80.130(a)]

Section 80.130 requires the CPA or CIA who conducts an attest engagement to issue a report that summarizes the procedures performed and findings. The regulations do not specify greater detail of what must be included in an attest report, however. EPA now believes it is necessary to specify certain items of information that should be included in each attest engagement report. This conclusion by EPA results from its review of the first attest engagement reports, for the 1995 reporting period, that were submitted to EPA at the end of May, 1996. These attest reports varied significantly in the amount of detail that was included, but

many reports were too scant to allow any meaningful review by EPA. In fact, some attest reports stated simply that the attest engagement had been conducted, and nothing more.

The purpose of the attest engagement reports is, at least in part, to enable the regulated party, and EPA, to gauge whether the attest engagement was properly performed through a review of the report, and in the case of findings, to put those findings into perspective including whether the findings raise issues regarding compliance by the refiner or importer. Where the attest report includes none of the details of the procedures completed, this review is not possible. As a result EPA now is proposing certain information about each attest engagement that must be included in all attest engagement reports.

Initially, EPA is proposing that attest engagement reports would have to identify who conducted the attest engagement, and give a telephone number of the auditor. This would allow EPA to easily contact the auditor in case questions arise. In addition, the report would have to identify the company and facility that was the subject of the audit.

More substantively, attest engagement reports would be required to include the volumes of gasoline, and the number of batches, ascertained during the engagement in various categories. Auditors are required to verify the volume and



batch number information, so this information is easily available to the auditor for inclusion in the report. EPA believes the required volume and batch information could be included in the report in the form of a simple table, which would require little effort to prepare.

In numerous instances the attest procedures require the auditor to obtain listings of all documents in various categories, and to review in more detail a random sampling of the documents. The procedures for selecting these samples are specified in § 80.127. EPA is proposing that for each occasion when such a sample is selected, the audit report would be required to include certain details of this sampling process, including the size of the population being sampled, the size of the sample selected, and the method used to ensure the sample was randomly selected. Inclusion of these details would enable EPA to verify that the sampling was properly completed, and to put in better perspective any findings that result from the auditor's review of the sample.

### 3. Attest engagement document retention [§ 80.130(b)]

Section 80.130(b) currently requires CPAs and CIAs who conduct attest engagements to retain "all records pertaining to the performance of each agreed upon procedure and pertaining to the creation of the agreed upon procedures report...." EPA's normal practice when conducting an

enforcement audit of a refiner, importer or oxygenate blender is to include an audit of the attest engagement, to ensure the engagement was completed as required. These audits of attest engagements require EPA to review the auditor's audit records.

During the course of conducting these enforcement audits, however, EPA discovered that many auditors retained a scant record of the conduct of their attest engagements. This absence of more comprehensive documentation made EPA's audits of the attest engagements more difficult.

As a result, EPA is proposing more specific regulatory requirements regarding the documents that auditors would be required to retain. The first category would be documents the auditor reviews that are created by the company that is the subject of the attest engagement. These company-created documents include laboratory analyses, inventory reconciliations and product transfer documents. The second category would be documents prepared by the auditor during the course of the attest engagement that summarize the conduct and work product of the attest engagement, commonly called "work papers." The third category would include computer data and/or the input, output and results of computer programs used by the auditor to conduct the audit. The last category would be correspondence between the

auditor and the company being audited on the subject of the attest engagement.

EPA believes the proposed record retention requirements would not expand the current record retention requirements, which apply to "all" records pertaining to attest engagements. The proposed requirements merely clarify that certain records are in the scope of the records EPA intends that auditors should retain.

#### 4. Attest procedures for GTAB [proposed § 80.131]

EPA is proposing procedures by which importers may treat imported gasoline as blendstock ("gasoline treated as blendstock" or "GTAB") in proposed § 80.83. As a result, EPA also is proposing attest procedures that would apply in the case of an importer who utilizes the GTAB option. The proposed GTAB attest procedures follow the general model of the attest procedures included in §§ 80.128, 80.129, 80.133 and 80.140. In particular, the attest procedures proposed for GTAB would instruct the auditor to track the movement of a portion of the GTAB batches to ensure the movement and subsequent use of the GTAB is consistent with the GTAB requirements.

#### 5. Attest procedures for refiners with in-line blending waivers from independent sampling and testing [§ 80.65(f); proposed § 80.132)]

Under § 80.65(f) refiners and importers of reformulated gasoline are required to carry out a program of independent sampling and testing, with one exception. This exception applies in the case of a refiner who has obtained an EPA-approved waiver from the independent sampling and testing requirements on the basis of producing reformulated gasoline using an appropriately sophisticated computer-controlled in-line blending operation (an "in-line blending waiver"). See, § 80.65(f)(4). In addition, under § 80.65(f)(4)(ii) any refiner with an in-line blending waiver is required to carry out an independent audit of each batch produced using the in-line blending operation. These audits constitute a check on the reported gasoline properties for in-line blended gasoline, which is a surrogate for the independent sampling and testing required for gasoline not produced under an in-line blending waiver.

The current regulations do not adequately describe the scope of in-line blending audits, however, and EPA is concerned that the in-line blending audits refiners have conducted have not been sufficiently comprehensive. As a result, EPA is proposing attest procedures that would have to be conducted for any refiner with an in-line blending waiver.

All in-line blending waivers that EPA has granted require the refiner to collect a volumetrically proportional

composite sample of each batch of in-line blended gasoline. This sample is collected using an automatic sampling apparatus that collects a portion of the gasoline being produced during the entire blending period, that is proportional to the volume of gasoline being produced any time. The refiner is required, by the terms of its waiver, to use the analysis of this composite sample as the basis of the report to EPA of the batch properties, i.e., as the "certification" analysis, or the "primary analysis result."

In-line blending waivers also require the refiner to obtain secondary analysis results for each regulated parameter, for use during the in-line blending audit to corroborate the primary analysis results. These confirmatory analysis results are of three general types: 1) results from analyzers that automatically collect and analyze samples from the blend on a continuous or very frequent basis, called "on-line" analysis results; 2) results from samples that are collected from the batch on a less frequent basis and analyzed at a separate laboratory, sometimes called "grab samples" or "off-line" analysis results; and 3) results from samples of the blendstocks used to produce the batch, together with the proportions of the blendstocks used.

The attest procedures proposed for in-line blending waiver situations are divided into two broad parts. First,

the auditor would review the EPA-approved in-line blending waiver, to identify the requirements regarding the collection, analysis and recording of the primary analysis result, and all confirmatory analysis results. In the second part of the procedures, the auditor would compare the primary analysis result with the confirmatory analysis results for each regulated parameter. Detailed attest procedures are proposed for these primary/confirmatory comparisons.

In the case of parameters that are confirmed using on-line analysis results, the auditor would identify the on-line analysis results that correspond to twelve discreet times during the blend. These twelve confirmatory results then would be compared with the primary result.

In the case of parameters confirmed using off-line analysis results, the auditor would compare the primary result with a randomly selected portion of the confirmatory results.

For parameters confirmed using blendstock analysis results, the auditor would, for twelve discreet times during the blend, identify the proportions of the different blendstocks being used, and the analysis results for these blendstocks. The confirmatory analysis result for the parameter at issue for each discreet time then would be

calculated as the volume-weighted total of the blendstock analysis results for that parameter.

Under the proposed attest procedures, each confirmatory analysis result would be evaluated in several ways. First, the auditor would determine if the confirmatory sample was collected, analyzed and recorded in accordance with the petition as approved by EPA. Second, the confirmatory analysis result would be compared with the primary analysis result. EPA understands that there normally will be some difference between the primary and confirmatory analysis results. Nevertheless, the magnitude and direction of the differences would give the auditor, the refiner, and EPA important information relevant to whether the primary analysis result is accurate.

The third evaluation of the confirmatory analysis result would address compliance with per-gallon standards. The per-gallon standards are oxygen and benzene under the complex model -- the per-gallon minimum or maximum where the standard is being met on average, or the per-gallon standard where the standard is being met per-gallon. In addition, and as discussed above in preamble section III.A.1, the complex model valid range limits are per-gallon standards for all parameters. Under § 80.41, each of these standards must be met on a per-gallon basis, and no portion of in-line blended gasoline may violate these standards even if a blend

meets the standards overall. The auditor would report as a finding any analysis result that violates an applicable per-gallon standard.

EPA is proposing that the in-line blending waiver attest engagement initially would review a random sample of the in-line blended batches. This would be a departure from the current requirement that each batch of in-line blended gasoline must be audited. Under the proposal, if any primary/confirmatory comparison differed by an amount greater than the ranges specified in § 80.65(e) for independent sampling and testing analysis comparisons, or if any sample violated a per-gallon standard, this random sample would be expanded.

Under § 80.65(f)(4)(ii)(C), reports for attest engagements must be submitted by February 28 each year for the prior calendar year. This attest reporting deadline is significantly earlier than the May 31 deadline for other attest reports. EPA now believes that the overall attest engagement activity, and the reports for those attest engagements, would benefit if the dates were harmonized. As a result, EPA is proposing that the in-line blending waiver attest reports would be submitted by May 31 each year for the prior calendar year's activity. As a result of this proposed timing change, EPA believes that refiners would be able to commission a single attest engagement that would



address all refinery activities, including the proposed in-line blending waiver attest procedures, and to submit reports for all attest engagement work at the same time.

EPA requests comment on this proposal to harmonize the reporting date for attest engagements, and the requirement that a single report be submitted that reflects all attest engagement work for a calendar year reporting period.

EPA also requests comment on the proposed in-line blending waiver attest procedures in general. In particular, EPA requests comment on whether each batch of in-line blended gasoline should be audited in every case, as opposed to the statistical sampling approach being proposed. In addition, EPA requests comment on an option of auditing a portion of the batches of each grade of in-line blended gasoline. The rationale for requiring grade-specific sampling is that for any particular refinery the diversity in gasoline quality between grades is likely to be greater than the diversity in quality between batches of the same grade.

#### **VIII. Environmental and Economic Impacts**

The environmental impacts of today's proposal would be minimal, if any. Most of the revisions proposed today are the result of a determination that certain regulatory requirements may be relaxed without detriment to the environment. Economic impacts would be generally beneficial

to affected parties due to the additional flexibility proposed in today's notice. Anti-competitive effects would not be expected. The environmental and economic impacts of the reformulated gasoline program are described in the Regulatory Impact Analysis supporting the December 1993 rule, which is available in Public Docket A-92-12 located at Room M-1500, Waterside Mall (ground floor), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460.

#### **IX. Public Participation**

EPA desires full public participation in arriving at its final decisions and solicits comments on all aspects of this proposal. Wherever applicable, full supporting data and detailed analysis should also be submitted to allow EPA to make maximum use of the comments. All comments should be directed to the EPA Air Docket, Docket A-97-03 (See **ADDRESSES**). See the **DATES** section for the deadline for submission of comments.

Today's rule proposes a variety of modifications to the standards and requirements for reformulated and conventional gasoline. While many of the proposed modifications would reduce compliance burdens on industry, a few modifications may have the effect of restricting compliance flexibility. EPA specifically solicits comments on the need to take the actions that would reduce this flexibility, including

comments on whether there are less restrictive measures that EPA may take.

Any proprietary information being submitted for the Agency's consideration should be markedly distinguished from other submittal information and clearly labeled "Confidential Business Information." Proprietary information should be sent directly to the contact person listed above, and not to the public docket, to ensure that it is not inadvertently placed in the docket. Information thus labeled and directed shall be covered by a claim of confidentiality and will be disclosed by EPA only to the extent allowed, and by the procedures set forth in 40 CFR Part 2. If no claim of confidentiality accompanies a submission when it is received by EPA, it may be made available to the public without further notice to the commenter.

#### **X. Regulatory Flexibility**

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions.

I certify that this action will not have a significant economic impact on a substantial number of small entities. The proposed revisions contained in today's action would affect small business refiners, importers, oxygenate blenders, distributors, wholesale purchaser-consumers, and retailers of gasoline. In addition, this action would affect small business laboratories that serve as independent laboratories for purposes of fulfilling the independent sampling and testing requirement for reformulated gasoline. However, for the following reasons, EPA has determined that this action would not have an adverse economic impact on these entities.

In the case of small business oxygenate blenders, distributors, wholesale purchaser-consumers and retailers of gasoline, the proposed revisions would provide greater flexibility and clarity with regard to existing requirements and would not have an adverse impact on these entities. However, the revision which would disallow the use of composite sampling of conventional gasoline would impose an additional burden on small refiners and importers that do not have the laboratory capability to test for all parameters and must send samples to other laboratories for testing. Composite sampling allows refiners and importers to demonstrate compliance based on the testing of fewer gasoline samples. EPA believes, however, that the increased

flexibility created by the relaxation and deletion of other refiner and importer requirements under today's action would more than offset any burden created by disallowing composite sampling. Today's action, for example, proposes provisions which would: allow importers to treat finished gasoline as blendstock to provide flexibility to correct off-spec imported gasoline; allow refiners to use conventional gasoline to produce RFG, which is currently prohibited; modify the sampling and testing requirements for refiners who produce gasoline by blending butane; eliminate the requirement for refiners of conventional gasoline who also import gasoline to calculate a special baseline for their imported gasoline; modify the requirements for every-batch testing of gasoline imported by truck; make the requirements for the accounting of blendstocks for conventional gasoline less restrictive; make the attest engagement procedures more efficient; and modify the reporting requirements for conventional gasoline to delete the requirements to report the grade of gasoline and include ethanol properties in the batch report. Other provisions would aid refiners and importers by clarifying and providing additional guidance with regard to existing requirements. EPA is also proposing provisions which would minimize the effect of disallowing composite sampling by allowing an alternative test method for sulfur content. EPA believes that most refiners have

the equipment required to perform the regulatory tests at their refinery except for sulfur under the current regulatory test method. Today's action would allow the use of a cost effective alternative test method for sulfur until September 1, 1998, the date on which EPA anticipates completion of a performance based test method rulemaking.

With regard to small business laboratories, there would be no increase in economic burden as a result of today's action. This action proposes to impose regulatory liability on entities serving as independent laboratories for failure to perform the duties necessary to fulfill the independent sampling and testing requirement (i.e., following prescribed procedures, retaining records, reporting to EPA). However, there would be no additional costs to either the laboratories or the refiners or importers who contract for the laboratory services, since the refiners and importers would continue to contract and pay for these services as they do under the current regulations. In addition, this action is not expected to affect a substantial number of small business laboratories, as the total number of laboratories currently registered with EPA is well under 100.

The EPA prepared a Regulatory Flexibility Analysis (RFA) for the final rule establishing standards for reformulated and conventional gasoline (59 FR 7716 (February

16, 1994)), which includes an analysis of the impact of these regulations on small refiners. The RFA is in the docket for that rulemaking: EPA Air Docket A-92-2.

#### **XI. Executive Order 12866**

Under Executive Order 12866 [58 FR 51735 (October 4, 1993)], the Agency must determine whether the regulatory action is "significant" and therefore subject to OMB review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may:

(1) have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local or tribal governments or communities;

(2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

It has been determined that this rule is not a significant action under the terms of the Executive Order 12866, and is therefore not subject to OMB review.

## **XII. Paperwork Reduction Act**

The information collection requirements in this proposed rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. An Information Collection Request (ICR) document has been prepared by EPA (ICR No. 1591.09) and a copy may be obtained from Sandy Farmer, OPPE Regulatory Information Division; U.S. Environmental Protection Agency (2137); 401 M St., S.W.; Washington, DC 20460 or by calling (202) 260-2740.

Although many of the revisions proposed in today's rule will have the effect of reducing the information collection requirements of the RFG/anti-dumping regulations, the proposed deletion of the composite sampling provision will mean that refiners and importers of conventional gasoline will be required to test each batch of gasoline rather than test a composite sample comprised of samples of two or more batches of gasoline. As discussed in Preamble Section VI.B.6., EPA is proposing this revision because EPA believes that composite sampling may not provide the accurate results necessary for measuring compliance by refiners and importers under the anti-dumping program, and may pose a significant



risk with regard to the enforcement and assurance of compliance.

The EPA estimates that refiners and importers currently spend approximately 1.67 hours of information collection per batch for compliance testing of conventional gasoline pursuant to the reformulated gasoline and anti-dumping final rule. This is the estimated burden above the hours refiners had expended on testing prior to promulgation of the rule. Most refiners had been testing every batch of conventional gasoline for some of the same properties for which testing is required under the rule.

Under the current rule, samples of conventional gasoline may be composited over a period up to one month. At a rate of one test per month, the number of hours spent per refiner/importer per year would be 20.04 hours. EPA estimates that there are approximately 230 refiners and importers subject to this rule. If all of these refiners and importers were to base their compliance on one composite sample per month, the total burden on industry would be 4,609.20 hours per year. EPA believes, however, that many refiners and importers currently conduct tests on every batch of gasoline rather than on composite samples, or test composite samples comprised of fewer batches than are produced over a one-month period. EPA believes, therefore, that, in practice, the number of hours currently spent on

testing by industry is likely to be much greater than this figure.

EPA estimates that, without the composite sampling option, refiners and importers would test an average of approximately 158 batches of conventional gasoline per refiner/importer per year. Applying the estimate of 1.67 hours per batch, the total number of hours per refiner/importer per year would be 263.86 hours, or a total of 60,687.80 hours industry-wide. If all 230 refiners and importers currently were basing compliance on one composite sample per month, the incremental burden of this action on industry would be 56,078.60 hours. At an estimated cost of \$53.31 per test for information collection, the total incremental cost of the additional testing burden to industry would be approximately \$1,790,150. However, as discussed above, most refiners conducted every-batch testing of some properties prior to promulgation of the final rule, and many refiners currently test every batch for compliance purposes rather than base compliance on the testing of composite samples. Therefore, EPA believes that the incremental burden of this proposed action on industry would be much smaller.

This action also proposes to eliminate the per-gallon NO<sub>x</sub> minimum standards for complex model averaged RFG, and increase the number of compliance surveys required beginning

in 1998 and thereafter from 50 to 70. EPA is proposing to eliminate the NOx per-gallon minimum standards because these standards may impose substantial costs in producing RFG without commensurate benefits to the environment. (See Preamble Section III.A.1.). The NOx per-gallon minimum standards were included in the final rule as a tool to assure an even distribution of NOx benefits from area to area. However, EPA believes that a less costly alternative, an increase in the number of required surveys, would achieve a similar level of assurance of even distribution of NOx benefits. EPA estimates that the incremental cost burden of these additional surveys will be roughly \$1,100,000 industry-wide (20 additional surveys at approximately \$55,000 each), or about \$7,333 per RFG refiner or importer ( $\$1,100,000 \div 150$  refiners/importers). The increased cost burden due to the additional survey requirement, however, would be more than offset by the elimination of the burden on industry imposed by the per-gallon NOx minimum standards.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and

maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An Agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR Part 9 and 48 CFR Chapter 15.

Comments are requested on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques. Send comments on the ICR to the Director, OPPE Regulatory Information Division; U.S. Environmental Protection Agency (2137); 401 M St., S.W.; Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th St., N.W., Washington, DC 20503, marked "Attention: Desk Officer for EPA." Include the ICR number in any correspondence. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after [Insert date of publication in

the FEDERAL REGISTER], a comment to OMB is best assured of having its full effect if OMB receives it by [Insert date 30 days after publication in the FEDERAL REGISTER]. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

### **XIII. Unfunded Mandates Act**

Under § 202 of the Unfunded Mandates Reform Act of 1995 ("Unfunded Mandates Act"), signed into law on March 22, 1995, EPA must prepare a budgetary impact statement to accompany any proposed or final rule that includes a Federal mandate that may result in expenditure by State, local, and tribal governments, in the aggregate; or by the private sector, of \$100 million or more. Under § 205, EPA must select the most cost-effective and least burdensome alternative that achieves the objectives of the rule and is consistent with the statutory requirements. Section 203 requires EPA to establish a plan for informing and advising any small governments that may be significantly or uniquely impacted by the rule.

EPA has determined that the action proposed today does not include a Federal mandate that may result in estimated costs of \$100 million or more to either State, local or tribal governments in the aggregate, or to the private sector. This action has the net effect of reducing burdens

of the reformulated gasoline program on regulated entities. Therefore, the requirements of the Unfunded Mandates Act do not apply to this action.

#### **XIV. Statutory Authority**

The statutory authority for the actions proposed today is granted to EPA by §§ 114, 211(c) and (k), and 301 of the Clean Air Act, as amended; 42 U.S.C. 7414, 7545(c) and (k), and 7601.

#### **List of Subject in 40 CFR Part 80**

Environmental Protection, Air pollution control, Fuel additives, Gasoline, Motor vehicle pollution, Incorporation by reference, Reporting and record keeping requirements.

Dated:

Carol M. Browner,  
Administrator.

For the reasons set out in the preamble, part 80 of title 40 of the Code of Federal Regulations is proposed to be amended as follows:

#### **PART 80--REGULATION OF FUELS AND FUEL ADDITIVES**

1. The authority citation for part 80 continues to read as follows:

Authority: Sections 114, 211, and 301(a) of the Clean Air Act as amended (42 U.S.C. 7414, 7545, and 7601(a)).

2. Section 80.2 is amended by removing and reserving paragraphs (y), (z), (tt) and (uu), and revising paragraphs (w), (ee), (gg) and (ss) to read as follows:

§ 80.2 Definitions.

\* \* \* \* \*

(w) Previously certified gasoline means reformulated or conventional gasoline or RBOB that has been produced by a refiner or oxygenate blender, or imported by an importer, in accordance with applicable standards and requirements, and that the refiner, oxygenate blender or importer has included or will include in the compliance calculations for reformulated or conventional gasoline.

\* \* \* \* \*

(ee) Reformulated gasoline means any gasoline whose formulation has been certified under § 80.40, and which meets each of the standards and requirements prescribed under § 80.41.

\* \* \* \* \*

(gg) Batch of gasoline means a quantity of gasoline that is homogeneous with regard to those properties that are specified for conventional or reformulated gasoline.

\* \* \* \* \*

(ss) Tank truck means a truck and/or trailer used to transport or cause the transportation of gasoline or diesel

fuel, that meets the definition of motor vehicle in section 216(2) of the Act.

\* \* \* \* \*

3. Section 80.3 is revised to read as follows:

§ 80.3 Test Methods.

(a) Lead content. Lead content shall be determined in accordance with American Society for Testing and Materials (ASTM) standard method D 3237-90, entitled "Standard Test Method for Lead in Gasoline by Atomic Absorption Spectroscopy", or ASTM standard method D 5059-92, entitled "Standard Test Method for Lead in Gasoline by X-Ray Spectroscopy".

(b) Phosphorus content. Phosphorus content shall be determined using ASTM standard method D 3231-94, entitled "Standard Test Method for Phosphorus in Gasoline".

(c) Reid vapor pressure (RVP). Reid Vapor Pressure (RVP) shall be determined using the test method specified in § 80.46(c).

(d) Oxygen and oxygenate content. Oxygen and oxygenate content, including ethanol content in percentage by volume, shall be determined using the test methods specified in § 80.46(g). The volume per-cent ethanol in fuel shall be calculated using the following equation:



$$V_{\text{EtOH}}(\%) = (Wt_{\text{EtOH}}(\%)) * (D_{\text{fuel}} / 0.7939)$$

Where:

$V_{\text{EtOH}}$  = Concentration of Ethanol by Volume.

$Wt_{\text{EtOH}}$  = Concentration of Ethanol by Weight.

$D_{\text{fuel}}$  = Relative Density of Fuel under Study @ 60°F.

(e) Cetane index. The cetane index of diesel fuel shall be determined using ASTM standard method D 976-91, entitled "Standard Methods for Calculated Cetane Index of Distillate Fuels."

(f) Sulfur content. Sulfur content shall be determined using the test method specified in § 80.46(a). ASTM D 4294-90 may be used as an alternative method for determining the sulfur content in diesel fuel.

(g) Aromatic content of diesel fuel. The aromatic content of diesel fuel shall be determined using ASTM standard method D 5186-96, entitled "Standard Test Method for Determination of Aromatic Content of Diesel Fuel by Supercritical Fluid Chromatography." Mass per-cent diesel aromatics shall be converted to volume per-cent diesel aromatics using the following equation:

$$\text{Vol}\% = (\text{Mass}\% * 0.916) + 1.33$$

Where Mass% refers to the output from D 5186-96.

(h) Incorporations by reference. ASTM standard test methods, D 3237-90, D 5059-92, D 3231-94, D 976-91, and D 5186-96 are incorporated by reference. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Dr., West Conshohocken, PA 19428. Copies may be inspected at the Air Docket Section (LE-131), room M-1500, U.S. Environmental Protection Agency, Docket No. A-97-03, 401 M Street, SW, Washington, DC 20460, or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

4. Section 80.8 is added to Subpart A to read as follows:

§ 80.8 Sampling methods for gasoline and diesel fuel.

The sampling methods specified in this section shall be used to collect samples of gasoline and diesel fuel for purposes of determining compliance with the requirements of this Part.

(a) Manual sampling. Manual sampling of tanks and pipelines shall be performed according to the applicable procedures specified in American Society for Testing and Materials (ASTM) method D 4057-95, entitled "Standard

Practice for Manual Sampling of Petroleum and Petroleum Products."

(b) Automatic sampling. Automatic sampling of petroleum products in pipelines shall be performed according to the applicable procedures specified in ASTM method D 4177-95, entitled "Standard Practice for Automatic Sampling of Petroleum and Petroleum Products."

(c) Sampling and sample handling for volatility measurement. Samples to be analyzed for Reid Vapor Pressure (RVP) shall be collected and handled according to the applicable procedures in ASTM method D 5842-95, entitled "Standard Practice for Sampling and Handling of Fuels for Volatility Measurement."

(d) Sample compositing. Composite samples shall be prepared using the applicable procedures in ASTM method D 5854-96, entitled "Standard Practice for Mixing and Handling of Liquid Samples of Petroleum and Petroleum Products."

(e) Incorporations by reference. ASTM standard practices D 4057-95, D 4177-95, D 5842-95, and D 5854-96, are incorporated by reference. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Dr., West

Conshohocken, PA 19428. Copies may be inspected at the Air Docket Section (LE-131), room M-1500, U.S. Environmental Protection Agency, Docket No. A-97-03, 401 M Street, SW, Washington, DC 20460, or at the Office of the Federal Register, National Archives and Records Administration, Washington, D.C. 20408, (202) 523-4534.

5. Section 80.27 is amended by revising paragraph (b) and the first three sentences of paragraph (d)(2) to read as follows:

§ 80.27 Controls and prohibitions on gasoline volatility.

\* \* \* \* \*

(b) Determination of compliance. Compliance with the standards listed in paragraph (a) of this section shall be determined using the sampling methods specified in § 80.8, and the testing method specified § 80.3(c).

\* \* \* \* \*

(d) \* \* \*

(2) In order to qualify for the special regulatory treatment specified in paragraph (d)(1) of this section, gasoline must contain denatured, anhydrous ethanol. The concentration of the ethanol, excluding the required denaturing agent, must be at least 9% and no more than 10% (by volume) of the gasoline. The ethanol content of the

gasoline shall be determined using the test method  
specified in § 80.3(d). \* \* \*

\* \* \* \* \*

6. Section 80.28 is amended by adding paragraph  
(g)(1)(iii) to read as follows:

§ 80.28 Liability for violations of gasoline volatility  
controls and prohibitions.

\* \* \* \* \*

(g) \* \* \*

(1) \* \* \*

(iii) An oversight program under paragraph (g)(1)(ii)  
of this section need not include periodic sampling and  
testing of gasoline in a tank truck operated by a common  
carrier, but in lieu of such tank truck sampling and  
testing, the common carrier shall demonstrate evidence of an  
oversight program for monitoring compliance with the  
volatility requirements of § 80.27 relating to the transport  
or storage of gasoline by tank truck, such as appropriate  
guidance to drivers on compliance with applicable  
requirements and the periodic review of records normally  
received in the ordinary course of business concerning  
gasoline quality and delivery.

\* \* \* \* \*

7. Section 80.29 is amended by revising paragraph (b) to read as follows:

§ 80.29 Controls and prohibitions on diesel fuel quality.

\* \* \* \* \*

(b) Determination of compliance.

(1) Any diesel fuel that does not show visible evidence of being dyed with either 1,4-dialkylamino-anthraquinone (which has a characteristic blue-green color in diesel fuel) or dye solvent red 164 (which has a characteristic red color in diesel fuel) shall be considered to be available for use in diesel motor vehicles and motor vehicle engines, and shall be subject to the prohibitions of paragraph (a) of this section.

(2) Compliance with the standards listed in paragraph (a) of this section shall be determined using the applicable sampling methods specified in § 80.8, and the testing methods specified in § 80.3.

\* \* \* \* \*

8. Section 80.30 is amended by revising paragraph (g)(1)(i) to read as follows:

§ 80.30 Liability for violations of diesel fuel control and prohibitions.

\* \* \* \* \*

(g) \* \* \*

(1) \* \* \*

(i) Evidence of an oversight program conducted by the carrier, for monitoring the diesel fuel stored or transported by that carrier, such as periodic sampling and testing of the cetane index and sulfur percentage of incoming diesel fuel. Such an oversight program need not include periodic sampling and testing of diesel fuel in a tank truck operated by a common carrier, but in lieu of such tank truck sampling and testing the common carrier shall demonstrate evidence of an oversight program for monitoring compliance with the diesel fuel requirements of § 80.29 relating to the transport or storage of diesel fuel by tank truck, such as appropriate guidance to drivers on compliance with applicable requirements and the periodic review of records normally received in the ordinary course of business concerning diesel fuel quality and delivery; and

\* \* \* \* \*

9. Section 80.41 is amended by revising the tables in paragraphs (d) and (f); adding paragraph (h)(3); and revising paragraph (p) to read as follows:

§ 80.41 Standards and Requirements for Compliance.

\* \* \* \* \*

(d) Phase I complex model averaged standards. The Phase I "complex model" standards for compliance when achieved on average are as follows:



Phase I Complex Model Averaged Standards	
VOC emissions performance reduction (percent) Gasoline designated for VOC-Control Region 1:	
Standard	$\geq 36.6$
Per-Gallon Minimum	$\geq 32.6$
Gasoline designated for VOC-Control Region 2:	
Standard	$\geq 17.1$
Per-Gallon Minimum	$\geq 13.1$
Toxics air pollutants emissions performance reduction (percent):	$\geq 16.5$
NOx emissions performance reduction (percent):	$\geq 1.5$
Oxygen content (percent, by weight):	
Standard	$\geq 2.1$
Per-Gallon Minimum	$\geq 1.5$
Benzene (percent, by volume):	
Standard	$\leq 0.95$
Per-Gallon Maximum	$\leq 1.30$

\* \* \* \* \*

(f) Phase II complex model averaged standards. The Phase II "complex model" standards for compliance when achieved on average are as follows:

Phase II Complex Model Averaged Standards	
VOC emissions performance reduction (percent)	
Gasoline designated for VOC-Control Region 1:	
Standard	≥29.0
Per-Gallon Minimum	≥25.0
Gasoline designated for VOC-Control Region 2:	
Standard	≥27.4
Per-Gallon Minimum	≥23.4
Toxics air pollutants emissions performance reduction (percent):	≥21.5
NOx emissions performance reduction (percent)	
Gasoline designated as VOC-Controlled:	≥6.8
Gasoline not designated as VOC-Controlled:	≥1.5
Oxygen content (percent, by weight):	
Standard	≥2.1
Per-Gallon Minimum	≥1.5
Benzene (percent, by volume):	
Standard	≤0.95
Per-Gallon Minimum	≤1.30

\* \* \* \* \*

(h) \* \* \*

(3) (i) In the case of reformulated gasoline subject to the simple model standards, the simple model limits specified at § 80.42(c)(1).

(ii) In the case of reformulated gasoline subject to the complex model standards, the complex model limits specified at § 80.45(f)(1)(i).

\* \* \* \* \*

(p) Effective date for changed minimum or maximum standards. In the case of any minimum or maximum standard that is changed to be more stringent by operation of paragraphs (k), (m), (n), or (o) of this section, the effective date for such change shall be the following number of days following the date EPA announces the change:

(1) 60 days for refinery or import facilities;

(2) 150 days for retail outlets and wholesale purchaser-consumer facilities; and

(3) 120 days for all other facilities.

\* \* \* \* \*

10. Section 80.45 is amended by revising paragraphs (c)(1)(iv)(B), (c)(1)(iv)(C)(6), (c)(1)(iv)(D)(6), (c)(1)(iv)(D)(12), (c)(1)(iv)(D)(13); (d)(1)(iv)(B); and (f)(1)(i) to read as follows:

§ 80.45 Complex emissions model.

\* \* \* \* \*

(c) \* \* \*

(1) \* \* \*

(iv) \* \* \*

(B) For fuels with E200, E300 and/or ARO levels outside the ranges defined in Table 6,  $Y_{\text{voc}}(t)$  shall be defined for Phase I:

$$\begin{aligned}
 Y_{\text{voc}}(t) = & 100\% \times 0.52 \times [\exp(v_1(\text{et}))/\exp(v_1(b)) - 1] \\
 & + 100\% \times 0.48 \times [\exp(v_2(\text{et}))/\exp(v_2(b)) - 1] \\
 & + \{100\% \times 0.52 \times [\exp(v_1(\text{et}))/\exp(v_1(b))]\} \\
 & \times \{[(0.0002144 \times E200_{\text{et}}) - 0.014470] \times \Delta E200\} \\
 & + \{[(0.0008174 \times E300_{\text{et}}) - 0.068624 \\
 & - (0.000348 \times \text{ARO}_{\text{et}})] \times \Delta E300\} \\
 & + \{[(-0.000348 \times E300_{\text{et}}) + 0.0323712] \times \Delta \text{ARO}\}] \} \\
 & + \{100\% \times 0.48 \times [\exp(v_2(\text{et}))/\exp(v_2(b))]\} \\
 & \times \{[(0.000212 \times E200_{\text{et}}) - 0.01350] \times \Delta E200\} \\
 & + \{[(0.000816 \times E300_{\text{et}}) - 0.06233 \\
 & - (0.00029 \times \text{ARO}_{\text{et}})] \times \Delta E300\} \\
 & + \{[(-0.00029 \times E300_{\text{et}}) + 0.028204] \times \Delta \text{ARO}\}] \}
 \end{aligned}$$

For Phase II:

$$\begin{aligned}
 Y_{\text{voc}}(t) = & 100\% \times 0.444 \times [\exp(v_1(\text{et}))/\exp(v_1(b)) - 1] \\
 & + 100\% \times 0.556 \times [\exp(v_2(\text{et}))/\exp(v_2(b)) - 1] \\
 & + \{100\% \times 0.444 \times [\exp(v_1(\text{et}))/\exp(v_1(b))]\}
 \end{aligned}$$

$$\begin{aligned}
& \times \{ [(0.0002144 \times E200_{et}) - 0.014470] \times \Delta E200 \} \\
& + \{ [(0.0008174 \times E300_{et}) - 0.068624 \\
& - (0.000348 \times ARO_{et})] \times \Delta E300 \} \\
& + \{ [(-0.000348 \times E300_{et}) + 0.0323712] \times \Delta ARO \} \} \\
& + \{ 100\% \times 0.556 \times [\exp(v_2(et))/\exp(v_2(b))] \\
& \times \{ [(0.000212 \times E200_{et}) - 0.01350] \times \Delta E200 \} \\
& + \{ [(0.000816 \times E300_{et}) - 0.06233 \\
& - (0.00029 \times ARO_{et})] \times \Delta E300 \} \\
& + \{ [(-0.00029 \times E300_{et}) + 0.028204] \times \Delta ARO \} \} \\
& * * * * * \\
& (C) * * *
\end{aligned}$$

(6) If  $[80.32 + (0.390 \times ARO)]$  exceeds 94 for the target fuel, and the target fuel value for E300 exceeds 94, then the E300 value for the "edge target" fuel shall be set equal to 94 volume percent.

$$\begin{aligned}
& * * * * * \\
& (D) * * *
\end{aligned}$$

(6) If  $[79.75 + (0.385 \times ARO)]$  exceeds 94 for the target fuel, and the target fuel value for E300 exceeds 94, then the E300 value for the "edge target" fuel shall be set equal to 94 volume percent.

$$* * * * *$$

(12) If the E300 level of the target fuel is less than 72 percent, then  $\Delta E300$  shall be set equal to  $(E300 - 72 \text{ percent})$ .

(13) If the E300 level of the target fuel is greater than 94 volume percent and  $(79.75 + (0.385 \times \text{ARO}))$  also is greater than 94, then  $\Delta\text{E300}$  shall be set equal to  $(\text{E300} - 94 \text{ volume percent})^* \quad * \quad *$

\*   \*   \*   \*   \*

(d)\*   \*   \*

(1)\*   \*   \*

(iv)\*   \*   \*

(B) For fuels with SUL, OLE, and/or ARO levels outside the ranges defined in Table 7 of paragraph (d)(1)(iv)(A) of this section,  $Y_{\text{nox}}(t)$  shall be defined as:

For Phase I:

$$\begin{aligned}
 Y_{\text{Nox}}(t) = & 100\% \times 0.82 \times [\exp(n_1(\text{et}))/\exp(n_1(b)) - 1] \\
 & + 100\% \times 0.18 \times [\exp(n_2(\text{et}))/\exp(n_2(b)) - 1] \\
 & + \{100\% \times 0.82 \times [\exp(n_1(\text{et}))/\exp(n_1(b))]\} \\
 & \times [\{[(-0.00000133 \times \text{SUL}_{\text{et}}) + 0.000692] \times \Delta\text{SUL}\} \\
 & + \{[(-0.000238 \times \text{ARO}_{\text{et}}) + 0.0083632] \times \Delta\text{ARO}\} \\
 & + \{[(0.000733 \times \text{OLE}_{\text{et}}) - 0.002774] \times \Delta\text{OLE}\}]\} \\
 & + \{100\% \times 0.18 \times [\exp(n_2(\text{et}))/\exp(n_2(b))]\} \\
 & \times [\{0.000252 \times \Delta\text{SUL}\} + \\
 & + \{[(-0.0001599 \times \text{ARO}_{\text{et}}) + 0.007097] \times \Delta\text{ARO}\} \\
 & + \{[(0.000732 \times \text{OLE}_{\text{et}}) - 0.00276] \times \Delta\text{OLE}\}]\}
 \end{aligned}$$

For Phase II:

\* \* \* \* \*

(f) \* \* \*

(1) \* \* \*

(i) \* \* \*

For reformulated gasolines:

Fuel property	Acceptable range
Oxygen.....	0.00 - 4.0 weight percent.
Sulfur.....	0.0 - 500.0 parts per million by weight.
RVP.....	6.4 - 10.0 pounds per square inch.
E200.....	30.0 - 70.0 evaporated percent.
E300.....	70.0 - 100.0 evaporated percent.
Aromatics.....	0.0 - 55.0 volume percent.
Olefins.....	0.0 - 25.0 volume percent.
Benzene.....	0.0 - 2.0 volume percent.

\* \* \* \* \*

11. Section 80.46 is revised to read as follows:

§ 80.46 Measurement of reformulated and conventional gasoline fuel parameters.

(a) Sulfur.

(1) Sulfur content shall be determined using American Society for Testing and Materials (ASTM) standard method D 2622-94, entitled "Standard Test Method for Sulfur in Petroleum Products by X-Ray Spectrometry."

(2) Alternative test method for conventional gasoline.

(i) Prior to September 1, 1998, any refiner or importer may determine sulfur content in conventional gasoline using standard method ASTM D 5453-93, entitled "Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels and Oils by Ultraviolet Fluorescence", provided that

(ii) the test result is correlated with the method specified in paragraph (a)(1) of this section.

(b) Olefins. Olefin content shall be determined using ASTM standard method D 1319-95a, entitled "Standard Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption."

(c) Reid vapor pressure (RVP).

(1) Reid Vapor Pressure (RVP) shall be determined using ASTM standard method D 5191-96, entitled "Standard Test Method for Vapor Pressure of Petroleum Products (Mini Method)," provided that



(2) The RVP equivalent is calculated using the following equation:

$$\text{RVP (PSI)} = (0.956 * x) - 0.347$$

or

$$\text{RVP (kPa)} = (0.956 * x) - 2.39$$

Where

x = The total measured pressure in PSI or kPa

(d) Distillation.

(1) Distillation parameters shall be determined using ASTM standard method D 86-96, entitled "Standard Test Method for Distillation of Petroleum Products;" except that

(2) The figures for repeatability and reproducibility given in degrees Fahrenheit in Table 9 in the ASTM method are incorrect, and shall not be used.

(e) Benzene. Benzene content shall be determined using either:

(1)(i) ASTM standard method D 3606-96, entitled "Standard Test Method for Determination of Benzene and Toluene in Finished Motor and Aviation Gasoline by Gas Chromatography;" except that

(ii) Instrument parameters must be adjusted to ensure complete resolution of the benzene, ethanol and methanol

peaks because ethanol and methanol may cause interference with ASTM standard method D 3606-96 when present; or

(2) The gas chromatography method specified in paragraphs (f)(1) and (2) of this section.

(f) \* \* \*

(3)(i) Prior to September 1, 1998, any refiner or importer may determine aromatics content using ASTM standard method D 1319-95a, entitled "Standard Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption," for purposes of meeting any testing requirement involving aromatics content; provided that

(ii) The refiner or importer test result is correlated with the method specified in paragraph (f)(1) of this section.

(g) Oxygen and oxygenate content.

(1) Oxygen and oxygenate content shall be determined using ASTM standard method D 5599-95, entitled "Standard Test Method for Determination of Oxygenates in Gasoline by Gas Chromatography and Oxygen Sensitive Flame Ionization Detection."

(2)(i) Prior to September 1, 1998, and when the oxygenates present are limited to MTBE, ETBE, TAME, DIPE, tertiary-amyl alcohol, and C<sub>1</sub> to C<sub>4</sub> alcohols, any refiner, importer, or oxygenate blender may determine oxygen and

oxygenate content using ASTM standard method D 4815-94a, entitled "Standard Test Method for Determination of MTBE, ETBE, TAME, DIPE, tertiary-Amyl Alcohol and C<sub>1</sub> to C<sub>4</sub> Alcohols in Gasoline by Gas Chromatography," for purposes of meeting any testing requirement; provided that

(ii) The refiner or importer test result is correlated with the method set forth in paragraph (g)(1) of this section.

(h) Butane test methods.

(1) Sulfur content in butane shall be determined using ASTM D 5623-94, entitled "Standard Test Method for Sulfur Compounds in Light Petroleum Liquids by Gas Chromatography and Sulfur Selective Detection."

(2) Light hydrocarbon content in butane shall be determined using ASTM D 2163-91, entitled "Standard Test Method for Analysis of Liquefied Petroleum (LP) Gas and Propene Concentrates by Gas Chromatography."

(3) Benzene and aromatic content of butane shall be determined using the Gas Producers Association (GPA) method 2186-95, entitled "Tentative Method for the Extended Analysis of Hydrocarbon Liquid Mixtures Containing Nitrogen and Carbon Dioxide by Temperature Programmed Gas Chromatography."

(i) Incorporations by reference. ASTM standard methods D 3606-96, D 1319-95a, D 4815-94a, D 2622-94, D 5453-93,

D 86-96, D 5191-96, D 5599-95, D 5623-94, D 2163-91, and GPA 2186-95 are incorporated by reference. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies of the ASTM standard methods may be obtained from the American Society of Testing Materials, 100 Barr Harbor Dr., West Conshohocken, PA 19428. Copies of GPA method 2186-95 may be obtained from the Gas Producers Association, 6526 East 60th Street, Tulsa, OK 74145. Copies may be inspected at the Air Docket Section (LE-131), room M-1500, U.S. Environmental Protection Agency, Docket No. A-97-03, 401 M Street SW., Washington, DC 20460 or at the Office of the Federal Register, National Archives and Records Administration, Washington, DC 20408, (202)523-4534.

12. Section 80.47 is added to subpart D to read as follows:

§ 80.47 Sampling of reformulated and conventional gasoline and RBOB.

(a) Sample collection, handling, and compositing procedures. Any person who samples reformulated or conventional gasoline, or blendstocks used to produce reformulated or conventional gasoline, in order to meet any requirement of subparts D or E shall follow the procedures specified in § 80.8.

(b) Determination of homogeneity for reformulated and conventional gasoline. Homogeneity of the gasoline shall be determined prior to preparation of, or analysis of, the sample used to establish the batch properties for purposes of §§ 80.65(e), 80.72 and 80.101(i). Homogeneity shall be determined as follows.

(1) Where the gasoline contained in a single tank or compartment is to be treated as a single batch:

(i) By collecting, at a minimum, upper, middle, and lower spot or tap samples following the procedures referenced in §§ 80.8(a) and (c); or

(ii)(A) By following procedures for tank mixing that result in complete tank homogeneity, that the party is able to demonstrate through historic sampling and testing data for the same types of blendstocks, storage tank configuration, mixing apparatus, and mixing protocol; and

(B) By collecting, at a minimum, upper, middle, and lower spot or tap samples of the batch, analyzing these samples for gravity, and demonstrating that the gravity values do not differ by more than 0.3° API, unless it is not possible to collect spot or tap samples from the storage tank.

(2) Where the product contained in a marine vessel with multiple compartments is to be treated as a single batch, by collecting a sample from each compartment using the running

sample collection procedure referenced in §§ 80.8(a) and (c).

(3) The samples collected under paragraphs (b)(1)(i) and (b)(2) of this section shall be analyzed for each parameter for which the batch is subject to, or that is used to calculate an emissions performance for which the batch is subject to, a standard specified in §§ 80.41 or 80.101.

(4) The analyses under paragraph (b)(3) of this section shall use the test methods specified in § 80.46, or alternative test methods for which the party is able to demonstrate correlation to the values obtained by the methods specified in § 80.46.

(5)(i) For gasoline to be considered homogeneous, the maximum difference in the analytical results of samples collected under paragraphs (b)(1)(i) and (b)(2) of this section shall be no larger than the range specified in § 80.65(e)(2)(i) for each parameter; however

(ii) In no case may any sample violate a per-gallon minimum or maximum standard under § 80.41 that is applicable to the batch.

(6) If the gasoline meets the criteria to be considered homogeneous, it may be treated as a batch pursuant to § 80.2(gg).

(c) Additional sampling options for imported gasoline.

(1) In the case of imported reformulated gasoline, the gasoline contained in marine vessels with multiple compartments may be treated as a single batch of reformulated gasoline and the properties may be based on a volume weighted composite sample prepared using the procedures referenced in § 80.8(d) provided that:

(i) All of the gasoline contained in the multiple compartments is transferred to a single shore tank; or

(ii) The gasoline from the vessel is transferred to multiple shore tanks and is determined for each tank separately to meet all per-gallon minimum or maximum standards under § 80.41 that are applicable to the batch, using the following procedure:

(A) The gasoline contained in the storage tanks prior to the transfer of any gasoline from the vessel (the "heels") shall be sampled and tested using the test methods specified in § 80.46, or alternative test methods for which the party is able to demonstrate correlation to the values obtained by the methods specified in § 80.46;

(B) The gasoline contained in the storage tanks subsequent to the transfer of all gasoline from the vessel shall be sampled and tested using the test methods specified in § 80.46, or alternative test methods for which the party is able to demonstrate correlation to the values obtained by the methods specified in § 80.46; and

(C) The volume and properties of the heels shall be subtracted from the volume and properties of the filled tanks to determine the volume and properties of the gasoline from the vessel only.

(iii) RVP is determined using the volume weighted average of the individual compartment sample results, analyzed prior to preparation of the batch composite sample.

(2) In the case of imported reformulated gasoline, the gasoline transferred to shore tanks from marine tank vessels may be certified based on shore tank sampling following the procedures of paragraphs (c)(1)(ii)(A) through (C) of this section, except that testing must be performed using only the methods specified in § 80.46.

(3) In the case of imported conventional gasoline the gasoline contained in marine vessels with multiple compartments may be treated as a single batch, provided that gasolines of different octane grades (e.g., premium, mid-grade and regular) are treated as separate batches.

(d) Requirements for RBOB. Each requirement of this section that applies to reformulated gasoline also applies to RBOB.

13. Section 80.49 is amended by revising the paragraph (a) introductory text, the entry for "New Parameter" in the table in paragraph (a)(1), the paragraph (a)(3) introductory



text, and the first three sentences in the paragraph (b) introductory text to read as follows:

§ 80.49 Fuels to be used in augmenting the complex emission model through vehicle testing.

\* \* \* \* \*

(a) Seven fuels (hereinafter called the "addition fuels") shall be tested for the purpose of augmenting the complex emission model with a parameter not currently included in the complex emission model. The properties of the addition fuels are specified in paragraphs (a)(1) and (2) of this section. The addition fuels shall be specified with at least the same level of detail and precision as in § 80.49(a)(5)(i), and

(1)\* \* \*

Fuel Property	Fuels						
	1	2	3	4	5	6	7
* * * * *							
New Parameter <sup>1</sup> .....	C	(C+B)/2	B	C	B	C	B

<sup>1</sup>C = Candidate level, B = Baseline level.

\* \* \* \* \*

(3) The addition fuels shall be specified with at least the same level of detail and precision as in § 80.49(a)(5)(i), and this information shall be included in

the petition submitted to the Administrator requesting augmentation of the complex emission model.

\* \* \* \* \*

(b) Three fuels (hereinafter called "extension fuels") shall be tested for purpose of extending the valid range of the complex emission model for a parameter currently included in the complex emission model. The properties of the extension fuels are specified in paragraphs (b)(2) through (4) of this section. The extension fuels shall be specified with at least the same level of detail and precision as in § 80.49(a)(5)(i), and \* \* \*

\* \* \* \* \*

14. Section 80.50 is amended by revising paragraph (a)(2) to read as follows:

§ 80.50 General test procedure requirements for augmentation of the emission models.

(a)\* \* \*

(2) Toxics emissions must be measured when testing the extension fuels per the requirements of § 80.49(b) or when testing addition fuels 1, 2, or 3 per the requirements of § 80.49 (a).

\* \* \* \* \*

15. Section 80.65 is amended by:

a. Revising paragraphs (d)(2)(vi)(A), (B), and (C); removing paragraphs (d)(2)(vi)(D) and (d)(2)(vi)(E); and revising paragraph (d)(3);

b. Revising paragraph (e)(1); revising the table in paragraph (e)(2)(i) to add an entry for "total oxygen content", and revising the first sentence of paragraph (e)(2)(ii)(B);

c. Revising paragraphs (f), (g), (h), and (i); and

d. Adding paragraph (j), to read as follows:

§ 80.65 General requirements for refiners, importers, and oxygenate blenders.

\* \* \* \* \*

(d) \* \* \*

(2) \* \* \*

(vi) \* \* \*

(A) Any oxygenate;

(B) Ether only; or

(C) Oxygenate of a type and amount that is specified by the refiner or importer.

(3)(i) The requirements of this paragraph (d)(3) apply to each batch of:

(A) Reformulated or conventional gasoline, or RBOB, produced by a refiner, or imported by an importer;

(B) Reformulated gasoline produced by an oxygenate blender who meets the oxygen standard on average;

(C) Oxygenate added to conventional gasoline downstream of the refinery where the oxygenate is included in refinery compliance calculations under § 80.101(g); and

(D) Each batch of blendstock produced or imported and transferred if blendstock accounting is required under §80.102(e).

(ii) Each batch identified in paragraph (d)(3)(i) of this section shall be assigned a number (the "batch number"), consisting of the EPA-assigned refiner, importer or oxygenate blender registration number, the EPA-assigned facility registration number, the last two digits of the year in which the batch was produced, imported or blended, and a unique number for the batch, beginning with the number one for the first batch produced, imported or blended each calendar year and each subsequent batch during the calendar year being assigned the next sequential number (e.g. 4321-54321-95-0000001, 4321-54321-95-0000002, etc.).

(e) Determination of volume and properties.

(1) Each refiner or importer shall for each batch of reformulated gasoline or RBOB produced or imported determine the volume, and the value of each of the properties specified in paragraph (e)(2)(i) of this section, except that the value for RVP must be determined only in the case of reformulated gasoline or RBOB that is VOC-controlled. These determinations shall:

(i) Be based on a representative sample of the reformulated gasoline or RBOB that is:

(A) Collected from a quantity of gasoline or RBOB that has been determined to be homogeneous as specified in § 80.47(b);

(B) Collected using the methodologies specified in § 80.8; and

(C) Analyzed using the methodologies specified in § 80.46;

(ii) In the case of RBOB, follow the oxygenate blending instructions specified in § 80.69(a)(2);

(iii) Be carried out either by the refiner or importer, or by an independent laboratory, as part of an independent analysis program under § 80.72 ; and

(iv) Be completed prior to the gasoline or RBOB leaving the refinery or import facility for each parameter that is subject to, or that is used to calculate an emissions performance that is subject to, a minimum or maximum standard specified in §§ 80.41(a) through (f).

\* \* \* \* \*

(2)\* \* \*

(i)\* \* \*

Fuel property	Range
* * *	* * *
Total oxygen content	0.10 wt%

(ii)\* \* \*

(B) The refiner or importer shall have the gasoline analyzed for the property at one additional independent laboratory.\* \* \*

(f) Independent analysis requirement.

(1) Any refiner or importer of reformulated gasoline or RBOB shall meet the independent analysis requirements specified under § 80.72; except that

(2) Any refiner that produces reformulated gasoline using computer-controlled in-line blending equipment is exempt from the independent sampling and testing requirements specified in paragraphs (f)(1) of this section, provided that such refiner:

(i) Obtains from EPA an exemption from these requirements. In order to seek such an exemption, the refiner shall submit a petition to EPA, such petition to include:

(A) A description of the refiner's computer-controlled in-line blending operation, including a description of:

- (1) The location of the operation;
- (2) The length of time the refiner has used the operation;
- (3) The volumes of gasoline produced using the operation since the refiner began the operation or during the previous three years, whichever is shorter, by grade;
- (4) The movement of the gasoline produced using the operation to the point of fungible mixing, including any points where all or portions of the gasoline produced is accumulated in gasoline storage tanks;
- (5) The physical lay-out of the operation;
- (6) The automated control system, including the method of monitoring and controlling blend properties and proportions;
- (7) Any sampling and analysis of gasoline that is conducted as a part of the operation, including on-line, off-line, and composite, and a description of the methods of sampling, the methods of analysis, the parameters analyzed and the frequency of such analyses, and any written, printed, or computer-stored results of such analyses, including information on the retention of such results;
- (8) Any sampling and analysis of gasoline produced by the operation that occurs downstream from the blending operation prior to fungible mixing of the gasoline, including any such sampling and analysis by the refiner and

by any purchaser, pipeline or other carrier, or by independent laboratories;

(9) Any quality assurance procedures that are carried out over the operation; and

(10) Any occasion(s) during the previous three years when the refiner adjusted any physical or chemical property of any gasoline produced using the operation downstream from the operation, including the nature of the adjustment and the reason the gasoline had properties that required adjustment; and

(B) A description of the independent audit program of the refiner's computer-controlled in-line blending operation that the refiner proposes will satisfy the requirements of this paragraph (f)(2) of this section; and

(ii) Carries out an attest engagement of the refinery's computer-controlled in-line blending operation for each calendar year reporting period, as follows:

(A) The audit shall follow the in-line blending attest procedures specified in § 80.132;

(B) The results of the in-line blending attest engagement shall be reported as specified in § 80.130, and shall be included in the attest report submitted to EPA no later than May 31 of each year; and

(C) The attest engagement shall be carried out by an auditor who meets the criteria specified in § 80.125; and



(iii) Complies with any other requirements that EPA includes as part of the exemption.

\* \* \* \* \*

(g) [Reserved]

(h) Compliance audits. Any refiner or importer of reformulated gasoline or RBOB, and any oxygenate blender of any RBOB who meets the oxygen standard on average, shall have the reformulated gasoline and RBOB it produced, imported or blended during each calendar year audited for compliance with the requirements of this subpart D, in accordance with the requirements of subpart F, at the conclusion of each calendar year. This audit requirement must be met separately for each refinery and for each importer.

(i) Exclusion of previously certified gasoline. Any refiner who combines blendstock with previously certified reformulated or conventional gasoline to produce reformulated gasoline or RBOB shall exclude the previously certified gasoline for purposes of demonstrating compliance with the standards under § 80.41. This exclusion shall be accomplished separately by the refiner for each refinery as follows.

(1)(i) Determine the volume and properties for each batch of previously certified gasoline received that is used to produce reformulated gasoline or RBOB, using the

procedures in paragraph (e)(1) of this section and in § 80.66, and the independent analysis requirements in paragraph (f) of this section in the case of previously certified reformulated gasoline.

(ii) (A) In the case of previously certified reformulated gasoline determine the emissions performances for toxics and NOx, and VOC for VOC-controlled reformulated gasoline, and the designations for VOC control and OPRG.

(B) In the case of previously certified conventional gasoline determine the exhaust toxics and NOx emissions performances.

(2) The volume and properties of any batch of gasoline produced using previously certified gasoline shall be determined without regard to the previously certified gasoline content.

(3) In the case of any parameter or emissions performance standard that has been designated by the refiner, for the refinery, to be met on a per-gallon basis under paragraph (d)(2)(v) of this section, the per-gallon standard that applies to any batch of reformulated gasoline or RBOB produced:

(i) Using any previously certified reformulated gasoline shall be the more stringent of:

(A) The per-gallon standard that applies to the refinery under § 80.41; or

(B) the most stringent value for that parameter or emissions performance for any previously certified reformulated gasoline used to produce the batch; or

(ii) Using any previously certified conventional gasoline shall be the standard that applies to the refinery under § 80.41.

(4) In the case of any parameter or emissions performance standard that has been designated by the refiner, for the refinery, to be met on average under paragraph (d)(2)(v) of this section, any previously certified gasoline shall be excluded from the refinery's compliance calculations as follows.

(i) The volume and properties of any batch of previously certified reformulated gasoline received at the refinery that is used to produce reformulated gasoline or RBOB shall be included in compliance calculations for the standard under § 80.67(g):

(A) As a negative batch, by multiplying the term  $V_i$  in § 80.67(g)(1)(ii) (i.e., the batch volume) times negative 1;

(B) In the averaging categories that correspond to the designations regarding VOC control and OPRG of the previously certified gasoline batch when received; and

(C) The net volume of gasoline in the refinery's compliance calculations shall be positive in each of the

following categories where the standard is being met on average:

Standard	Gasoline Category that Must Have Net Positive Volume
Oxygen	All RFG <sup>1</sup>
	RFG that is non-OPRG
Benzene	All RFG and RBOB
VOC emissions performance	RFG and RBOB that is VOC-controlled for Region 1
	RFG and RBOB that is VOC-controlled for Region 2
Toxics emissions performance	All RFG and RBOB
NOx emissions performance	All RFG and RBOB
	RFG and RBOB that is VOC-controlled
<sup>1</sup> "RFG" is an abbreviation for reformulated gasoline.	

(ii) The volume and properties of any batch of previously certified conventional gasoline received at the refinery that is used to produce reformulated gasoline or RBOB:

(A) Shall be included in the refinery's anti-dumping compliance calculations under § 80.101(g) as a negative batch; and

(B) The net volume of gasoline in the refinery's anti-dumping compliance calculations shall be positive.

(5) Any refiner, but no other person, may use the procedures specified in this paragraph (i) to combine previously certified conventional gasoline with reformulated gasoline, to reclassify conventional gasoline into reformulated gasoline, or to change the designations of reformulated gasoline with regard to VOC control and OPRG.

(6) Nothing in this paragraph (i) prevents any party from combining previously certified reformulated gasolines from different sources in a manner that does not violate the prohibitions in § 80.78(a).

(j) Importer certification of marine tank vessels.

Importers shall sample each batch of imported RFG, RBOB, and conventional gasoline:

(1) At the time and place that is allowed by the U.S. Customs Service under 19 CFR § 151.42 Controls on unlading and gauging; and

(2) Following the sampling requirements in § 80.47; however, in no case shall the volume of a single batch be larger than the volume reported as a single item of merchandise in the U.S. Customs Service entry for summary

documentation as specified by 19 CFR Part 141, Subparts D, E, and F, and 19 CFR Part 142, Subparts A and B.

16. Section 80.67 is amended by adding paragraph (g)(1)(iii) and revising paragraph (h)(1)(iv) to read as follows:

§ 80.67 Compliance on average.

\* \* \* \*

(g) \* \* \*

(1) \* \* \*

(iii) Where the product being evaluated is RBOB, the  $V_i$  term under paragraphs (g)(1)(i) and (ii) of this section shall be the volume of reformulated gasoline that will result when the RBOB is blended with the type and amount of oxygenate specified for the RBOB under § 80.69(a)(2)(i).

\* \* \* \*

(h)\* \* \*

(1)\* \* \*

(iv)The credits are transferred, either through inter-company or intra-company transfers, directly from the refiner, importer, or oxygenate blender that creates the credits to the refiner, importer, or oxygenate blender that uses the credits to achieve compliance;

\* \* \* \*

17. Section 80.68 is amended by:

- a. Revising paragraphs (b)(1)(iv) and (b)(2)(ii);
- b. Revising paragraphs (c)(4)(i) and (c)(4)(ii);
- c. Revising paragraphs (c)(9)(i)(B) and (c)(9)(ii)(B);
- d. Revising paragraph (c)(10)(ii), and adding paragraphs (c)(10)(iii), (c)(10)(iv) and (c)(10)(v);
- e. Revising paragraph (c)(11);
- f. Revising paragraph (c)(12); and
- g. Revising paragraphs (c)(13)(iii)(A) and (B), to read as follows:

§ 80.68 Compliance Surveys.

\* \* \*

(b)\* \* \*

(1)\* \* \*

(iv) 70 surveys shall be conducted in 1998 and thereafter.

(2)\* \* \*

(ii) In the event that any covered area(s) fails a survey or survey series according to the criteria set forth in paragraph (c) of this section, the annual decreases in the numbers of surveys prescribed by paragraph (b)(1) of this section, as adjusted by paragraph (b)(2)(i) of this section, shall be adjusted as follows in the year following the year of the failure.\* \* \*

\* \* \* \* \*

(c) \* \* \*

(4) \* \* \*

(i) An oxygen and benzene survey series shall consist of all surveys conducted in a single covered area during a single calendar year, and a toxics survey series shall consist of all surveys conducted in a single covered area during a single calendar year except for surveys conducted during the period January 1, 1998 through April 30, 1998.

(ii) A NOx survey series shall consist of all surveys conducted in a single covered area during the periods January 1 through May 31 (except for surveys conducted during the period January 1, 1998 through April 30, 1998), and September 16 through December 31 during a single calendar year.

\* \* \* \* \*

(9)(i) \* \* \*

(B) The annual average of the toxics emissions reduction percentages for all samples from a survey series shall be calculated according to the following formula<sup>31</sup>:

---

<sup>31</sup> The formula requires, first, that the toxic reductions of samples taken in each one-week survey be averaged to obtain an average for each such survey. Then these survey averages are, themselves, averaged separately for high-ozone and non-high-ozone season surveys, to obtain two overall averages. These overall averages are each to be multiplied by a seasonal weight (0.468 for high-ozone season and 0.532 for non-high ozone season) and the resulting products added together to obtain the average



$$AATER = \left( \left( \frac{\sum_{i=1}^{s_1} \left( \frac{\sum_{j=1}^{n_1} TER_{1,j}}{n_1} \right)_i}{s_1} \times 0.468 \right) + \left( \left( \frac{\sum_{i=1}^{s_2} \left( \frac{\sum_{j=1}^{n_2} TER_{2,j}}{n_2} \right)_i}{s_2} \right) \times 0.532 \right) \right)$$

where

AATER = the annual average toxics emissions reduction

$TER_{1,j}$  = the toxics emissions reduction for sample j  
of gasoline collected during the high ozone  
season

$TER_{2,j}$  = the toxics emissions reduction for sample j  
of gasoline collected outside the high ozone  
season

$n_1$  = the number of gasoline samples collected  
during a one-week survey conducted within the  
high ozone season

$s_1$  = the number of one-week surveys conducted  
within the high ozone season

---

annual toxic emission reduction.

$n_2$  = the number of gasoline samples collected during a one-week survey conducted outside the high ozone season

$s_2$  = the number of one-week surveys conducted outside of the high ozone season

\* \* \* \* \*

(ii) \* \* \*

(B) The annual average of the toxics emissions reduction percentages for a survey series shall be calculated according to the formula specified in paragraph (c)(9)(i)(B) of this section; and

\* \* \* \* \*

(10) \* \* \*

(ii) The average NOx emission reduction percentage for each single week-long NOx survey shall be calculated as the average of all NOx emission reduction percentages from the survey.

(iii) The covered area shall have failed a NOx survey if the average NOx emissions reduction percentage for all survey samples is less than the applicable Phase I or Phase II complex model per-gallon standard for NOx emissions reduction.

(iv) The average NOx emission reduction percentage for a NOx survey series shall be calculated according to the following formula:

$$ANER = \frac{\sum_{i=1}^S \left( \frac{\sum_{j=1}^n NER_j}{n} \right)_i}{S}$$

Where

ANER = the average NOx emission reduction percentage for a NOx survey series,

n = the number of gasoline samples taken in the course of a week-long NOx survey,

NER<sub>j</sub> = the NOx emissions reduction percentage for gasoline sample j determined according to the appropriate methodology at §80.45, and

S = the number of week-long NOx surveys conducted during the year

(v) The covered area shall have failed a NOx survey series if the average NOx emissions reduction percentage for

the series, as computed in paragraph (c)(10)(iv) of this section, is less than the applicable Phase I or Phase II complex model per gallon standard for NOx emissions reduction.

(11)(i) The results of each benzene content survey series conducted in any covered area shall be determined according to the following formula:

$$AABC = \frac{\sum_{i=1}^S \left( \frac{\sum_{j=1}^n BC_j}{n} \right)_i}{S}$$

where

AABC = the annual average benzene content for a benzene content survey series,

n = the number of gasoline samples taken in the course of a week-long benzene content survey,

BC<sub>j</sub> = the benzene content for gasoline sample j taken in the course of a week-long benzene content survey, and

S = the number of week-long benzene content surveys conducted during the year.

(ii) If the annual average benzene content computed in paragraph (c)(11)(i) of this section is greater than 1.000 percent by volume, the covered area shall have failed a benzene content survey series.

(12)(i) The results of each oxygen content survey series conducted in any covered area shall be determined according to the following formula:

$$AAOC = \frac{\sum_{i=1}^S \left( \frac{\sum_{j=1}^n OC_j}{n} \right)_i}{S}$$

where

AAOC = the annual average oxygen content for an oxygen content survey series,

n = the number of gasoline samples taken in the course of a week-long oxygen content survey,

$O_{c_j}$  = the oxygen content for gasoline sample  $j$   
 taken in the course of a week-long oxygen  
 content survey, and

$S$  = the number of week-long oxygen content  
 surveys conducted during the year.

(ii) If the annual average oxygen content computed in paragraph (c)(12)(i) of this section is less than 2.00 percent by weight, the covered area shall have failed an oxygen content survey series.

\* \* \* \* \*

(13) \* \* \*

(iii) Include procedures such that the number of samples included in each survey or survey series (whichever is applicable) assures that:

(A) In the case of simple model surveys or survey series, the average levels of oxygen, benzene, RVP, and aromatic hydrocarbons are determined with a 95% confidence level, with error of less than 0.1 psi for RVP, 0.05% for benzene (by volume), and 0.1% for oxygen (by weight); and

(B) In the case of complex model surveys or survey series, the average levels of oxygen, benzene, RVP, aromatic hydrocarbons, olefins, T-50, T-90 and sulfur are determined with a 95% confidence level, with error of less than 0.1 psi

for RVP, 0.05% for benzene (by volume), 0.1% for oxygen (by weight), 0.5% for olefins (by volume), 5° F. for T-50 and T-90, and 10 ppm for sulfur; or an equivalent level of precision for the complex model-determined emissions parameters; and

\* \* \* \* \*

18. Section 80.69 is amended by:

a. Revising paragraphs (a)(2), (a)(6)(iv), and the introductory text of (a)(7);

b. Removing and reserving paragraph (a)(4), and removing paragraphs (a)(8), (a)(9), and (a)(10);

c. Revising paragraph (b)(1), and adding paragraph (b)(5); and

d. Revising paragraphs (e)(2)(i)(A) and (e)(2)(v), to read as follows:

§ 80.69 Requirements for downstream oxygenate blending.

\* \* \* \* \*

(a) \* \* \*

(2) \* \* \*

(i) Adding oxygenate to a representative sample of the RBOB, as follows:

(A) Where the RBOB is designated as any-oxygenate, add ethanol so that the resulting reformulated gasoline has a maximum oxygen content of 2.0 wt%;

(B) Where the RBOB is designated as ether-only, add MTBE so that the resulting reformulated gasoline has a maximum oxygen content of 2.0 wt%; or

(C) Where the RBOB has oxygenate blending instructions other than "any-oxygenate" or "ether-only" and where the refiner or importer meets the contractual and quality assurance requirements in paragraphs (a)(5) through (a)(7) of this section:

(1) Add the oxygenate specified for the RBOB, or if more than one oxygenate is allowed, from the following list of oxygenates add the first that is specified: ethanol, MTBE, ETBE, any other specified oxygenate; and

(2) Add the volume of oxygenate specified for the RBOB, or if a range is specified, add the minimum vol%; or

(D) Where the RBOB has oxygenate blending instructions other than "any-oxygenate" or "ether-only," and where the refiner or importer fails to meet the contractual and quality assurance requirements in paragraphs (a)(5) through (a)(7) of this section, add 4.0 vol% ethanol; and

(ii) Determining the properties and characteristics, including the oxygen and oxygenate content, of the resulting gasoline using the methodology specified in § 80.65(e).

\* \* \* \* \*

(4) [Reserved]

\* \* \* \* \*



(6) \* \* \*

(iv) Carry out the quality assurance sampling and testing requirements for oxygenate blenders specified in § 80.69(e)(2);

(7) Conduct a quality assurance sampling and testing program to be carried out at the facilities of each oxygenate blender who blends any RBOB produced or imported by the refiner or importer with any oxygenate, to determine whether the reformulated gasoline which has been produced through blending contains the oxygen type and oxygen amount specified by the refiner or importer, and complies with the standard for oxygen specified in § 80.41. The testing shall use the oxygen and oxygenate test method specified in § 80.46(g).

\* \* \* \* \*

(b) \* \* \*

(1) Add oxygenate as follows.

(i) For RBOB designated as "any oxygenate" add any oxygenate.

(ii) For RBOB designated as "ether-only" add an ether oxygenate (e.g., MTBE, ETBE, TAME, or butanol).

(iii) For RBOB designated as either "any-oxygenate" or "ether-only" add an amount of oxygenate that:

(A) Is equal to or greater than the minimum oxygen or oxygenate content specified for the RBOB, or the amount of

oxygenate necessary for the resulting reformulated gasoline to meet the applicable oxygen minimum standard, whichever is greater; and

(B) Does not exceed the applicable oxygen maximum content requirement.

(iv) For RBOB not designated "any-oxygenate" or "ether-only" add oxygenate of the type specified for the RBOB, and in an amount that is equal to or greater than the minimum amount specified for the RBOB and that is equal to or less than the oxygen maximum standards in § 80.41.

(v) In addition to the oxygenates specified in paragraphs (b)(1)(i) through (b)(1)(iv) of this section, the RFG produced using RBOB may contain an amount of other oxygenate, provided that the other oxygenate:

(A) Has a maximum volume of:

(1) 0.4 volume % ethanol; or

(2) 0.6 volume % MTBE, ETBE, TAME or butanol; or

(3) 0.2 volume % methanol; and

(B) Was not added intentionally.

\* \* \* \* \*

(5) Oxygenate blenders who blend oxygenate in trucks are not subject to the requirements of paragraph (b)(4) of this section, provided that the following requirements are met:

(i) The oxygenate blending shall be carried out using computer-controlled in-line or sequential blending that operates in such a manner that the volumes of oxygenate and RBOB are automatically dispensed when a particular grade of gasoline is selected for loading into a truck, and no operator instructions are required regarding the oxygenate-RBOB proportions when an individual truck is loaded.

(ii) The oxygenate blender shall be the party who operates the computer-controlled in-line or sequential blending equipment.

(iii) The oxygenate blender shall base its compliance calculations on the volumes and properties of RBOB and oxygenate used during a period not longer than one calendar month.

(iv) In calculating the oxygen content of for each batch of RFG produced, the oxygenate blender shall use the following equation:

$$W_o = \frac{V_o * d_o * O_o}{(V_g * d_g) + (V_o * d_o)}$$

Where:  $W_o$  = weight percent oxygen in blend from oxygenate

$V_o$  = volume percent oxygenate

$d_o$  = density of oxygenate (g/ml)

$O_o$  = weight fraction oxygen in oxygenate

$V_g$  = volume of gasoline

$d_g$  = density of gasoline

And where the densities and weight fractions of oxygen are used:

Oxygenate	Density at 60 °F (gm/ml)	Weight fraction oxygen
ethanol	0.7939	0.3473
ethyl t-butyl ether (ETBE)	0.7452	0.1566
ethyl t-amyl ether (ETAET)	0.7452	0.1566
methanol	0.7963	0.4993
methyl t-butyl ether (MTBE)	0.7460	0.1815
t-amyl methyl ether (TAME)	0.7758	0.1566
diisopropyl ether (DIPE)	0.7282	0.1566
t-butyl alcohol	0.7922	0.2158
n-propanol	0.8080	0.2662

(v) In determining the volume % ethanol to use in paragraph (b)(5)(iv) of this section, the denaturant content of ethanol (if used), shall be either:

(A) 5 vol%, provided that the oxygenate blender conducts a program of quality assurance sampling the ethanol used, as follows:

(1) The frequency of the sampling and testing shall be at least one sample every month;

(2) In the event an ethanol sample from this quality assurance program has an oxygenate purity level of less than 92.1%, the oxygenate blender must: 1) use the greater denaturant content for all oxygen compliance calculations for the ethanol that was tested, and; 2) increase the frequency of quality assurance sampling and testing to one sample every two weeks, and must maintain this frequency until four successive samples show an ethanol purity content that is equal to or greater than 92.1%.

(3) The formula for calculating denaturant content based upon ethanol purity is the following:

$$DC = 99.01 - \left( \frac{OP}{0.98} * 100 \right)$$

Where:

DC = denaturant content, in vol%

OP = measured ethanol purity, expressed as decimal  
or

(B) The measured denaturant content for each batch of oxygenate used to produce RFG.

(vi) During each oxygen averaging period, the oxygenate blender shall use only the assumed denaturant content of ethanol (if used) or only the measured denaturant content for all compliance calculations for an oxygenate blending facility.

(vii) The oxygenate blender shall conduct a program of quality assurance sampling and testing the RFG produced using the procedures and at the frequencies specified under § 80.69(e)(2).

\* \* \* \* \*

(e) Additional requirements for oxygenate blenders who blend oxygenate in trucks. Any oxygenate blender, other than a terminal storage tank blender specified in § 80.69(c), shall:

\* \* \* \* \*

(2) \* \* \*

(i) \* \* \*

(A) Prior to combining the resulting gasoline with any other gasoline; or

\* \* \* \* \*

(v) In the event the testing results for any sample indicate the gasoline does not contain the specified type and amount of oxygenate (within the ranges specified in § 80.65(e)(2)(i)):

\* \* \* \* \*

19. Section 80.70 is amended to read as follows:

§80.70 Covered areas.

\* \* \* \* \*

(1) The Sacramento, California, ozone nonattainment area, redesignated as a severe ozone nonattainment area effective June 1, 1995, is a covered area for purposes of subpart D, beginning on June 1, 1996. The Sacramento, California ozone nonattainment area is comprised of:

(1) All portions of El Dorado County except that portion of El Dorado County within the drainage area naturally tributary to Lake Tahoe including said Lake. (See 40 CFR 81.275)

(2) All portions of Placer County except that portion of Placer County within the drainage area naturally tributary to Lake Tahoe including said Lake, plus that area in the vicinity of the head of the Truckee River described as follows: commencing at the point common to the aforementioned drainage area crest line and the line common

to Townships 15 North and 16 North, Mount Diablo Base and Meridian (M.D.B.&M.), and following that line in a westerly direction to the northwest corner of Section 3, Township 15 North, Range 16 East, M.D.B.&M., thence south along the west line of Sections 3 and 10, Township 15 North, Range 16 East, M.D.B.&M., to the intersection with the said drainage area crest line, thence following the said drainage area boundary in a southeasterly, then northeasterly direction to and along the Lake Tahoe Dam, thence following the said drainage area crest line in a northeasterly, then northwesterly direction to the point of beginning. [46 FR 3891, Jan. 16, 1981] (See 40 CFR 81.275)

(3) That portion of Solano County which lies north and east of a line described as follows. Description of boundary in Solano County between San Francisco and Sacramento: Beginning at the intersection of the westerly boundary of Solano County and the 1/4 section line running east and west through the center of Section 34; T. 6 N., R. 2 W., M.D.B.&M., thence east along said 1/4 section line to the east boundary of Section 36, T. 6 N., R. 2 W., thence south 1/2 mile and east 2.0 miles, more or less, along the west and south boundary of Los Puntos Rancho to the northwest corner of Section 4, T. 5 N., R. 1 W., thence east along a line common to T. 5 N. and T. 6 N. to the northeast corner of Section 3, T. 5 N., R. 1 E., thence south along section



lines to the southeast corner of Section 10, T. 3 N., R. 1 E., thence east along section lines to the south 1/4 corner of Section 8, T. 3 N., R. 2 E., thence east to the boundary between Solano and

(4) The southern portion of Sutter County described as follows. South of a line connecting the northern border of Yolo County to the southwest tip of Yuba County and continuing along the southern Yuba County border to Placer County.

(5) The northern portion of Sutter County described as follows: North of a line connecting the northern border of Yolo County to the southwest tip of Yuba County and continuing along the southern Yuba County border to Placer County.

20. Section 80.72 is added to subpart D to read as follows:

§ 80.72 Independent analysis requirements.

(a) Independent sampling and analysis required. Any refiner or importer of reformulated gasoline or RBOB shall carry out a program of independent sample collection and analyses for the reformulated gasoline it produces or imports, which meets the requirements of one of the following two options:

(1) Option 1. The refiner or importer shall, for each batch of reformulated gasoline or RBOB that is produced or imported, have the gasoline sampled and tested by the designated independent laboratory according to the requirements specified in this section.

(2) Option 2. The refiner or importer shall have a periodic independent testing program carried out for all reformulated gasoline or RBOB produced or imported, which shall consist of the designated independent laboratory sampling each batch of reformulated gasoline or RBOB, and analyzing each sample identified under paragraph (d) of this section, according to the requirements specified in this section.

(b) Designation of independent laboratory.

(1) Any refiner or importer shall designate one independent laboratory for each refinery or import facility at which reformulated gasoline or RBOB is produced or imported, and shall identify this laboratory to EPA under the registration requirements of § 80.76.

(2) In order to be considered independent:

(i) The laboratory shall not be operated by any refiner or importer who produces or imports reformulated gasoline or RBOB, or by any refiner or importer that is part of a corporate organization that includes a refiner or importer of reformulated gasoline or RBOB, including subsidiary

corporations, parent corporations and subsidiaries thereof, and employees of any of these corporations;

(ii) The laboratory shall be free from any interest in any refiner or importer; and

(iii) The refiner or importer shall be free from any interest in the laboratory; however

(iv) Notwithstanding the restrictions in paragraphs (b)(2)(i) through (iii) of this section, a laboratory shall be considered independent if it is owned or operated by a gasoline pipeline company, regardless of ownership or operation of the gasoline pipeline company by refiners or importers, provided that such pipeline company is owned and operated by four or more refiners or importers.

(3) Use of a laboratory that is debarred, suspended, or proposed for debarment pursuant to the Governmentwide Debarment and Suspension regulations, 40 CFR Part 32, or the Debarment, Suspension and Ineligibility provisions of the Federal Acquisition Regulations, FAR 48 subpart 9.4, shall be deemed noncompliance with the requirements of this section.

(4) Any laboratory that fails to comply with the requirements of this section shall be subject to debarment or suspension under Governmentwide Debarment and Suspension regulations, 40 CFR Part 32, or the Debarment, Suspension

and Ineligibility regulations, Federal Acquisition Regulations FAR 48 subpart 9.4.

(c) Sampling and reporting. For all samples collected or analyzed pursuant to the requirements of this section, the refiner or importer shall have the independent laboratory:

(1) Collect a representative sample from the batch of reformulated gasoline following the sampling procedures specified in § 80.47;

(2) Determine which standards are being met on a per-gallon basis and which standards are being met on average, and obtain the refiner's or importer's assigned batch number for the batch being sampled;

(3) Determine the volume of the batch;

(4) Determine the identification number of the gasoline storage tank or tanks in which the batch was stored at the time the sample was collected;

(5) Determine the date and time the batch became finished reformulated gasoline, and the date and time the sample was collected;

(6) Determine the grade of the batch (e.g., premium, mid-grade, or regular); and

(7) In the case of reformulated gasoline produced through computer-controlled in-line blending, determine the date and time the blending process began and the date and

time the blending process ended, unless exempt under [add cite to § 80.65(f)];

(8) Retain each sample for a period of 30 days, except that this period shall be extended to a period of up to 180 days upon request by EPA; and

(9) Supply to EPA any sample collected or a portion of any such sample, according to the requirements of paragraph (f) of this section.

(d) Selecting samples for analysis. A refiner or importer shall have any laboratory serving as the independent laboratory under the periodic independent analysis option of paragraph (a)(2) of this section, for each refinery or importer, analyze gasoline samples identified as follows:

(1) General instructions.

(i) Samples must be selected for analysis for each two week period. Each two-week period begins on Sunday night at midnight, and lasts for the subsequent two weeks. The first two-week period begins at midnight on August 7, 1994, the second two-week period begins at midnight on August 21, 1994, etc.

(ii) EPA may issue special instructions for selecting samples for analysis for any specific refiner, refinery, importer, or independent lab that differ in whole or in part from the instructions contained in this paragraph (d), and

if such special instructions are issued they must be followed instead of the instructions contained in this protocol.

(2) Identify samples for the current analysis cycle.

(i) Identify each sample of RFG or RBOB collected during the preceding two-week period, and the refiner or importer assigned batch identification number for each sample.

(ii) Add any samples carried over from a prior analysis cycle, from paragraphs (d)(3)(i) and (ii) of this section.

(iii) Order the samples from the preceding two-week period, plus any carry over samples, in chronological order using the batch identification number for each sample.

(3) Determine the number of samples to be analyzed.

(i) The number of samples that must be analyzed for the current analysis cycle is the number of samples identified under paragraph (d)(2) of this section that is evenly divisible by ten.

(ii) Any remainder from this division is the number of samples that must be carried over to the subsequent analysis cycle. Any carry over samples must be those with the largest batch identification numbers.

For example, if the number of samples identified under paragraph (d)(2) is thirty seven, with batch numbers 4321-54321-95-002534 through 4321-54321-95-002570, the

number of samples that must be analyzed in the current analysis cycle is three, and seven samples must be carried over to the subsequent analysis cycle. The specific samples that must be carried over are those seven with the largest batch identification numbers, or samples 4321-54321-95-002564 through 4321-54321-95-002570.

(iii) To the extent any sample carry over would result in a sample being retained by the independent lab for more than 30 days, this sample shall be retained by the independent laboratory until the sample is not carried over to a subsequent analysis cycle, but for a maximum of 180 days.

(iv)(A) If the number of samples identified under paragraph (d)(2) is less than ten, then all samples should be carried over to the subsequent analysis cycle.

(B) If the number of samples identified under paragraph (d)(2) is less than ten, and any sample carry over would result in a sample being retained for more than 180 days, then one sample must be analyzed from the number, and none of the samples would be carried over to the subsequent analysis cycle.

(4) Identify which samples to analyze.

(i) Identify the beginning point for using the Random Number Table at paragraph (d)(4)(ii) of this section for the current analysis cycle.

(A) Identify the last two digits from the closing point for the Dow Jones Industrial Average as reported in the Wall Street Journal for the first day the New York Stock Exchange is open following the close of the preceding two-week period.

For example, for the two-week period ending at midnight on Sunday, August 20, the relevant two digits would be the last two digits for the close for the Dow Jones Industrial Average for Monday, August 21, as reported in the Wall Street Journal for Tuesday, August 22. If this Dow Jones Industrial Average close is 3,741.06, the relevant two digits would be 06.

(B) The beginning point for the Random Number Table at paragraph (d)(4)(ii) of this section for the current analysis cycle is the row number (from Column A of the Random Number Table) that corresponds to the number identified under paragraph (d)(4)(i)(A) of this section.

Using the example from paragraph (d)(4)(i)(A) of this section, the applicable row number would be 06, and the first random number would be 27.



## (ii) Random Number Table

Column		Column		Column	
<u>A</u>	<u>B</u>	<u>A</u>	<u>B</u>	<u>A</u>	<u>B</u>
00	60	39	91	78	65
01	77	40	95	79	29
02	38	41	01	80	64
03	16	42	02	81	57
04	45	43	76	82	59
05	39	44	79	83	83
06	27	45	19	84	10
07	93	46	11	85	52
08	97	47	88	86	53
09	37	48	73	87	30
10	06	49	43	88	48
11	18	50	74	89	69
12	98	51	12	90	24
13	05	52	31	91	62
14	92	53	85	92	99
15	72	54	94	93	51
16	71	55	35	94	56
17	87	56	40	95	36
18	20	57	55	96	08
19	41	58	86	97	14
20	00	59	34	98	07
21	78	60	22	99	44
22	33	61	46		
23	61	62	89		
24	75	63	70		
25	25	64	50		
26	54	65	03		
27	80	66	09		
28	32	67	67		
29	17	68	42		
30	15	69	82		
31	63	70	84		
32	04	71	96		
33	21	72	28		
34	90	73	66		
35	68	74	49		
36	58	75	23		
37	13	76	26		
38	47	77	81		

(iii) For each sample for the current analysis cycle under paragraph (d)(2) of this section, excluding any

samples carried over to the subsequent analysis cycle under paragraphs (d)(3)(ii) or (d)(3)(iv)(A) of this section, identify the last two digits of the batch identification number.

This process is illustrated in the following table:

If the batch number is:	The last two digits are:
4321-54321-95-002533	33
4321-54321-95-002593	93

(iv) Compare the two digit number from Column B of the Random Number Table at the beginning point identified under paragraph (d)(4)(ii) of this section (the first random number) with each of the two digit sample numbers identified under paragraph (d)(4)(iii) of this section.

(v) If the first random number matches any sample number, this sample is identified as a sample for analysis. If the random number matches more than one sample number, only the sample with the lowest batch identification number is identified as a sample for analysis.

(vi) If the first random number does not match any sample number, then move to the next number in the Random Number Table, and repeat the process described under paragraph (d)(4)(v) of this section.

In the example under paragraph (d)(4)(iii) of this section, there is no match for the first random number (27), but there is a match for the second random number (93), and

sample number 4321-54321-95-002593 would be identified for analysis.

(vii) Continue this process until the number of samples identified for analysis equals the number under paragraphs (d)(3)(i) or (d)(4)(ii) of this section.

(e) Analysis of samples.

(1) Any independent laboratory who analyzes a sample under the requirements of this section shall use the analysis methodologies specified in § 80.46.

(2) If a sample to be analyzed is of RBOB, the sample first must be blended with oxygenate as follows:

(i) If the RBOB is designated as any-oxygenate, ethanol shall be blended at a volume that results in 2.0 wt% oxygen;

(ii) If the RBOB is designated as ether-only, MTBE shall be blended at a volume that results in 2.0 wt% oxygen;

(iii) If the RBOB is other than any-oxygenate or ether-only, the RBOB shall be blended with the oxygenate specified for the RBOB, or if more than one oxygenate is allowed, from the following list of oxygenates the first that is allowed by the refiner's instructions: ethanol, MTBE, ETBE, any other specified oxygenate. The volume of oxygenate shall be the volume specified in the refiner's instructions, or if a range is specified, the minimum volume specified.

(f) Shipment of samples to EPA.

(1) Quality assurance samples. Any laboratory serving as the independent laboratory under this section shall, for each refinery or importer, supply certain gasoline samples to EPA according to the following requirements.

Notwithstanding the gasoline samples identified in this paragraph (f), EPA may specify a different frequency for sending samples to EPA for any refiner, refinery, importer, or independent lab, and if such different frequency is specified it must be followed.

(2) Refiners and importers using the periodic independent analysis option.

(i) In the case of samples identified for analysis under paragraph (d) of this section, for each thirty-third sample that is analyzed for each refinery or importer a portion of the sample must be sent to EPA.

(ii) In the case of samples that are not identified for analysis under paragraph (d) of this section, each thirty-third sample that is collected for each refinery or importer but that is not analyzed by the independent laboratory must be sent to EPA.

(3) Refiners and importers using the 100% independent analysis option. In the case of refiners and importers using the 100% independent analysis option of paragraph (a)(1) of this section, for every thirty-third sample that is analyzed

for each refinery or importer, a portion of the sample must be sent to EPA.

(4) Samples that violate applicable standards.

(i) The remaining portion of each sample that violates an applicable per-gallon standard must be labeled as such and shipped to EPA.

(ii) The applicable standards are those specified under § 80.41. In the case of standards being met on a per-gallon basis, the per-gallon standards are the applicable standards. In the case of standards being met on an average basis, the per-gallon minimums and maximums are the applicable standards. Beginning on January 1, 1998, per-gallon standards include the complex model range limits specified under § 80.41(h)(3).

(5) Sample shipping procedures.

(i) Each sample sent to EPA must be sealed in containers and transported in accordance with the procedures specified in § 80.8, and identified with the independent lab's name and registration number and the sample information specified in paragraph (e)(1) through (7) of this section.

(ii) The quantity of sample that must be sent is: in the case of samples that have been analyzed by the independent lab, the entire volume remaining following the laboratory analysis which should be a minimum of 330mL; and

in the case of samples that have not been analyzed by the independent lab, a minimum of 70% of one quart.

(iii) Samples identified for shipping to EPA must be sent via an overnight package service or a comparable means to the address and following procedures specified by EPA.

21. Section 80.74 is amended by revising paragraphs (a)(2)(iii), (b)(2), (b)(5) and (b)(6), and adding paragraphs (b)(7), (b)(8), (b)(9), and (h) to read as follows:

§ 80.74 Recordkeeping requirements.

\* \* \* \* \*

(a) \* \* \*

(2) \* \* \*

(iii) (A) The results of the test as originally printed by the testing apparatus, or where no printed result is generated by the testing apparatus, the results as originally recorded by the person who performed the tests; and

(B) Any record that contains results for the test that are not identical to the results recorded in paragraph (a)(2)(iii)(A); and

\* \* \* \* \*

(b) \* \* \*

(2) The information specified in § 80.47(b) used to establish gasoline homogeneity;

\* \* \* \* \*

(5) In the case of any refinery or importer subject to the simple model standards, the calculations used to determine the 1990 baseline levels of sulfur, T-90, and olefins, and the calculations used to determine compliance with the standards for these parameters;

(6) In the case of any refinery or importer subject to the complex model standards before January 1, 1998, the calculations used to determine the baseline levels of VOC, toxics, and NOx emissions performance;

(7) In the case of any imported GTAB, records that reflect the storage and physical movement of the GTAB from the point of importation to the point of blending to produce reformulated gasoline; and

(8) In the case of any gasoline classified as previously certified gasoline under the terms of § 80.65(i):

(i) Results of the tests to determine the properties and volume of the previously certified gasoline when received at the refinery; and

(ii) Records that reflect the storage and movement of the previously certified gasoline within the refinery to the point the previously certified gasoline is used to produce reformulated gasoline.

(9) In the case of any transmix blended with gasoline, records that reflect the volumes of gasoline and transmix that are blended.

\* \* \* \* \*

(h) Independent laboratories. The refiner or importer shall have any laboratory serving as an independent laboratory under § 80.72 keep the records specified in paragraphs (a)(2)(i) through (iii), (b)(1) through (3), and (b)(4)(i) of this section, and records containing the information specified under § 80.72(c)(1).

\* \* \* \* \*

22. Section 80.75 is amended by:

- a) Revising the paragraph (a) introductory text;
  - b) Revising paragraphs (a)(2)(vi) and (a)(2)(vii), and adding paragraphs (a)(2)(viii) and (a)(2)(ix);
  - c) Revising paragraph (a)(3);
  - d) Revising and redesignating paragraph (n) as paragraph (o), and adding paragraph (n) to read as follows:
- § 80.75 Reporting requirements.

\* \* \* \* \*

(a) Quarterly reports for reformulated gasoline. Any refiner or importer that produces or imports any reformulated gasoline or RBOB, and any oxygenate blender that produces reformulated gasoline meeting the oxygen



standard on average, shall submit quarterly reports to the Administrator for each refinery or oxygenate blending facility at which such reformulated gasoline or RBOB was produced and for all such reformulated gasoline or RBOB imported by each importer. The refiner, importer or oxygenate blender shall include notification to EPA of per-gallon versus average election with the first quarterly reports submitted each year.

\* \* \* \* \*

(2) \* \* \*

(vi) For any importer, the PADD in which the import facility is located;

(vii) For any oxygenate blender, the oxygen content;

(viii) In the case of any imported GTAB, identification of the gasoline as such; and

(ix) In the case of any previously certified gasoline used in a refinery operation under the terms of § 80.65(i), the following information relative to the previously certified gasoline when received at the refinery:

(A) Identification of the previously certified gasoline as such;

(B) The batch number assigned by the receiving refinery;

(C) The date of receipt; and

(D) The volume, properties and designations of the batch.

(3) The following formula shall be used to convert weight percent oxygen from an oxygenate to volume percent oxygenate:

$$V_o = \frac{W_g * d_g}{W_o * d_o}$$

Where:  $V_o$  = volume percent oxygenate  
 $W_o$  = weight percent oxygen in blend from oxygenate  
 $W_g$  = weight percent gasoline in blend from gasoline  
 $d_o$  = density of oxygenate (g/ml)  
 $d_g$  = density of gasoline (g/ml)

The following densities and weight fractions of oxygen should be used for these calculations:

Oxygenate	Density at 60 °F (gm/ml)	Weight fraction oxygen
ethanol	0.7939	0.3473
ethyl t-butyl ether (ETBE)	0.7452	0.1566
ethyl t-amyl ether (ETAΕ)	0.7452	0.1566
methanol	0.7963	0.4993

methyl t-butyl ether (MTBE)	0.7460	0.1815
t-amyl methyl ether (TAME)	0.7758	0.1566
diisopropyl ether (DIPE)	0.7282	0.1566
t-butyl alcohol	0.7922	0.2158
n-propanol	0.8080	0.2662

\* \* \* \* \*

(n) Reports by independent laboratories. The refiner or importer shall have any laboratory serving as an independent laboratory under § 80.72 submit to EPA the following reports:

(1) A report for the period January through March shall be submitted by May 31; a report for the period April through June shall be submitted by August 31; a report for the period July through September shall be submitted by November 30; and a report for the period October through December shall be submitted by February 28;

(2) Each report shall include, for each sample of reformulated gasoline that was analyzed during a period, the analysis results for the sample and the information specified in §§ 80.72 (c)(1) through (7).

(o) Report submission. The reports required by this section shall be:

(1) Submitted on forms and following procedures specified by the Administrator; and

(2) Signed and certified as correct by the owner or a responsible corporate officer of the refiner, importer, oxygenate blender, or independent laboratory.

23. Section 80.77 is amended by revising the introductory text and paragraphs (c), (f), (g)(3) and (j), to read as follows:

§ 80.77 Product Transfer Documentation.

On each occasion when any person transfers custody or title to any reformulated gasoline or RBOB, other than when gasoline is sold or dispensed for use by ultimate consumers at a retail outlet or wholesale purchaser-consumer facility, the transferor shall provide to the transferee documents which include the information specified in this section. These documents shall be transferred no later than the time of the physical transfer of the gasoline in the case of custody transfers, and within 30 days following the transfer in the case of title transfers.

\* \* \* \* \*

(c) The volume of gasoline or RBOB which is being transferred;

\* \* \* \* \*

(f) The proper identification of the product as reformulated gasoline or RBOB;

(g) \* \* \*

(3) In the case of VOC-controlled reformulated gasoline that contains ethanol, identification of the gasoline as containing ethanol.

\* \* \* \* \*

(j) With the exception of custody transfers to truck carriers, retail outlets and wholesale purchaser-consumer facilities, the information required in paragraphs (f), (g) and (i) of this section may be in the form of product codes, provided that:

(1) The codes are standardized for the distribution system in which they are used; and

(2) The transferee is given the information to interpret the codes.

24. Section 80.78 is amended by:

- a) Revising the introductory text of paragraph (a)(1);
- b) Revising paragraph (a)(1)(v)(C) and adding paragraph (a)(1)(vi) ;
- c) Revising paragraph (a)(2);
- d) Removing and reserving paragraph (a)(3);
- e) Revising paragraphs (a)(4) through (7);
- f) Revising paragraph (a)(10);
- g) Adding paragraphs (a)(11), (a)(12), and (a)(13), to read as follows:

§ 80.78 Controls and prohibitions on reformulated gasoline.

(a) Prohibited activities.

(1) No person may produce, import, sell, distribute, offer for sale or distribution, dispense, supply, offer for supply, store or transport any gasoline for use by ultimate consumers in a reformulated gasoline covered area unless the gasoline meets the definition of reformulated gasoline, and

\* \* \* \* \*

(v) \* \* \*

(C) Unless each gallon of such gasoline that is subject to complex model standards has a VOC and NOx emissions reduction percentage which is greater than or equal to the applicable minimum specified in § 80.41; and

(vi) Unless each gallon of such gasoline that is subject to complex model standards has property values that are within the acceptable range limits for the complex model specified under § 80.45(f)(1)(i).

\* \* \* \* \*

(2) No person may produce, import, sell or distribute, offer for sale or distribution, dispense, supply, offer for supply, store, or transport any gasoline represented as reformulated gasoline or RBOB:

\* \* \* \* \*

(3) [Reserved]

(4) Gasoline shall be presumed to be for use by ultimate consumers in a reformulated gasoline covered area unless the product transfer documentation accompanying such gasoline clearly indicates, as specified in § 80.106, that the gasoline is intended for sale and use only outside any covered area.

(5) No person may combine any reformulated gasoline with any conventional gasoline or blendstock, except a refiner who does so at a refinery under the requirements specified in § 80.65(i).

(6) No person may add any oxygenate to reformulated gasoline, except oxygenate of the type that was used to produce the reformulated gasoline and in an amount such that the reformulated gasoline meets the oxygen maximum standard in § 80.41(g) after the oxygenate has been added.

(7) No person may combine any RBOB with any other gasoline, blendstock, or oxygenate, except:

(i) Oxygenate of the type specified for the RBOB, and in an amount that is equal to or greater than the minimum amount specified for the RBOB and is equal to or less than the amount allowed by the oxygen maximum standard in § 80.41(g);

(ii) Other RBOB for which the same oxygenate type is specified, in which case the minimum oxygenate volume specification for the blended RBOB will be the largest

minimum volume specification for any of the RBOB's that are combined; or

(iii) Under the terms of paragraph (a)(5) of this section.

\* \* \* \* \*

(10) No person may cause another person to commit the actions prohibited under this paragraph (a).

(11) Exemptions.

(i) The prohibited activities specified in paragraphs (a)(1) of this section do not apply in the case of gasoline that is used for research, development, or testing purposes, provided that:

(A) The research, development, or testing program:

(1) Has a purpose that constitutes an appropriate basis for exemption;

(2) Necessitates the exemption;

(3) Is reasonable in scope; and

(4) Has a degree of control consistent with the purpose of the program; and

(B) The product transfer documentation associated with such gasoline shall identify the gasoline as conventional gasoline for use in research, development, or testing, as applicable, and shall state that it is to be used only for research, development, or testing purposes;



(C) The gasoline shall not be sold, distributed, offered for sale or distribution, dispensed, supplied, offered for supply, transported to or from, or stored by a gasoline retail outlet in a covered area specified in § 80.70. The gasoline also shall not be sold, distributed, offered for sale or distribution, dispensed, supplied, offered for supply, or transported to or from, or stored by a wholesale purchaser-consumer facility in a covered area specified in § 80.70, unless such facility is associated with the research, development or testing program that uses the gasoline;

(D) Prior to the initial use of the product, and subsequently at least on an annual basis, the party using the gasoline for research, development, or testing purposes shall submit to EPA the following information:

(1) A description of the research, development, or testing program and the purpose of the program, including the range of noncomplying properties of the fuel expected to be used in the program;

(2) The expected dates on which the program will begin and end, and the mileage duration of the program;

(3) The identification of any vehicles or engines in which the gasoline is to be used;

(4) The location where the gasoline will be stored, and the location where the gasoline will be used;

(5) The volume of the product to be used;

(6) The identification of the source (e.g., the gasoline distributor) of the gasoline; and

(7) An explanation of why reformulated gasoline cannot be used in the program.

(8) An explanation of why the program cannot be conducted in an area that is not a covered area specified in § 80.70.

(E) The party using the gasoline for the research, development or testing program shall submit to EPA the program results upon completion of the program.

(F) The submissions required under paragraphs (a)(11)(i)(D) and (E) of this section shall be:

(1) Certified as being accurate by the owner or president of the company or business performing the research, development, or testing; and

(2) Submitted to the following EPA addresses:

Director (6406J)

Fuels and Energy Division

U.S. Environmental Protection Agency

401 M Street S.W., Washington, D.C. 20460

and

Director (2242A)

Air Enforcement Division

U.S. Environmental Protection Agency

401 M Street, S.W.

Washington, D.C. 20460

(G) The exemption in this paragraph (a)(11) shall be null and void upon written notification by EPA.

(ii)(A) The prohibited activities specified in paragraphs (a)(1) of this section do not apply in the case of gasoline that is used to fuel aircraft, or racing motor vehicles or racing boats that are used only in sanctioned racing events, provided that product transfer documents associated with such gasoline, and any pump stand from which such gasoline is dispensed, identify the gasoline either as conventional gasoline that is restricted for use in aircraft, or as conventional gasoline that is restricted for use in racing motor vehicles or racing boats that are used only in sanctioned racing events.

(B) A vehicle shall be considered to be a racing vehicle only if the vehicle:

(1) Is operated only in conjunction with sanctioned racing events;

(2) Exhibits racing features and modifications such that it is incapable of safe and practical street or highway use;

(3) Is not licensed, and is not licensable, by any state for operation on public streets or highways;

(4) Is not currently, and previously has not been, operated on public streets or highways; and

(5) Could not be converted to public street or highway use at a cost that is reasonable compared to the value of the vehicle.

(12) The prohibitions against combining certain categories of gasoline under paragraphs (a)(1)(iii), (a)(5), (a)(7), (a)(8), and (a)(10) of this section do not apply in the case of a party who is changing the type of gasoline stored in a gasoline storage tank or the type of gasoline transported through a gasoline pipe or manifold within a single facility (a gasoline storage tank, pipe, or manifold change of service ), or in the case of a change of service that involves mixing gasoline with blendstock, provided that:

(i) The change of service is for a legitimate operational reason and is not for the purpose of combining the categories of gasoline or of combining gasoline with blendstock;

(ii) Prior to adding product of the new category the volume of product of the old category in the tank, pipe or manifold is made as low as possible through normal pumping operations;

(iii) The volume of product of the new category that is added to the tank, pipe or manifold is as large as possible

taking into account the availability of product of the new category; and

(iv) In any case where the new category of product is reformulated gasoline, subsequent to adding the gasoline of the new category a representative sample from the tank, pipe or manifold is collected and analyzed, and such analysis shows compliance with each standard under § 80.41 that is relevant to the new gasoline category. The analysis for each standard must be conducted using the method specified under § 80.46, or using another method that is approved by the American Society of Testing and Materials provided that the other method is correlated with the method specified under § 80.46.

(13) The prohibition against combining reformulated gasoline with RBOB under paragraph (a)(8) of this section does not apply in the case of a party who is changing the type of product stored in a tank from which trucks are loaded, from reformulated gasoline to RBOB, or vice versa, provided that:

(i) The change of service requirements described in paragraph (a)(12) of this section can not be met without taking the storage tank out of service;

(ii) Prior to adding product of the new category the volume of product of the old category in the tank is drawn

down to the lowest point which allows trucks to be loaded during the transition;

(iii) The volume of product of the new category that is added to the tank is as large as possible taking into account the availability of product of the new category;

(iv) When transitioning from RBOB to reformulated gasoline:

(A) If the reformulated gasoline in the storage tank has a oxygen content of less than 1.5 wt%, oxygenate must be blended into the RFG at the loading rack such that the RFG has a minimum oxygen content of 1.5 wt%;

(B) Subsequent to any oxygenate blending, the reformulated gasoline must meet all applicable standards that apply at the terminal; and

(C) Prior to the date the VOC-control standards apply to the terminal the reformulated gasoline in the storage tank must have an oxygen content of not less than 1.5 wt%;

(v) When transitioning from reformulated gasoline to RBOB:

(A) The oxygen content of the reformulated gasoline produced using the RBOB must be not less than the minimum oxygen amount specified in the RBOB product transfer documents;

(B) Subsequent to any oxygenate blending, the reformulated gasoline must meet all applicable standards; and

(C) The transition from reformulated gasoline to RBOB may not begin until the date the VOC-control standards no longer apply to the terminal; and

(vi) The party must demonstrate compliance with the requirements specified in paragraphs (a)(13)(iv) and (v) of this section through testing of samples collected from the terminal storage tank and from trucks loaded at the terminal subsequent to each receipt of new product until the transition is complete. The analyses must be conducted using the test method specified under § 80.46, or using another test method that is approved by the American Society of Testing and Materials provided that the other method is correlated with the method specified under § 80.46.

25. Section 80.79 is amended by revising paragraphs (b)(2) and (b)(3), and adding paragraph (c)(3) to read as follows:

§ 80.79 Liability for violations of the prohibited activities.

\* \* \* \* \*

(b) \* \* \*

(2) Where a violation is found at a facility which is operating under the corporate, trade or brand name of a refiner or importer, that refiner or importer must show, in addition to the defense elements required by paragraph (b)(1) of this section, that the violation was caused by:

(i) An act in violation of law (other than the Act or this part), or an act of sabotage or vandalism; or

(ii) The action of any retailer or wholesale purchaser-consumer supplied by the refiner or importer in violation of a contractual undertaking imposed by the refiner or importer designed to prevent such action, and despite periodic sampling and testing by the refiner or importer to ensure compliance with such contractual obligation; or

(iii) The action of any reseller, distributor, oxygenate blender, carrier, or a retailer or wholesale purchaser-consumer supplied by any of these persons, in violation of a contractual undertaking imposed by the refiner or importer designed to prevent such action, and despite periodic sampling and testing by the refiner or importer to ensure compliance with such contractual obligation; or

(iv) The action of any carrier or other distributor not subject to a contract with the refiner or importer but engaged by the refiner or importer for transportation of gasoline, despite specification or inspection of procedures



and equipment by the refiner or importer which are reasonably calculated to prevent such action.

(3) In this paragraph (b), to show that the violation "was caused" by any of the specified actions the party must demonstrate by reasonably specific showings, by direct or circumstantial evidence, that the violation was caused or must have been caused by another.

(c) \* \* \*

(3) An oversight program conducted by a carrier under paragraph (c)(1) of this section need not include periodic sampling and testing of gasoline in a tank truck operated by a common carrier, but in lieu of such tank truck sampling and testing the common carrier shall demonstrate evidence of an oversight program for monitoring compliance with the requirements of section 80.78 relating to the transport or storage of gasoline by tank truck, such as appropriate guidance to drivers on compliance with applicable requirements and the periodic review of records normally received in the ordinary course of business concerning gasoline quality and delivery.

\* \* \* \* \*

26. Section 80.83 is revised to read as follows:

§ 80.83 Gasoline treated as blendstock.

An importer may treat imported gasoline as blendstock (Gasoline Treated as Blendstock, or GTAB) and exclude the GTAB from its importer compliance calculations under § 80.65(c) for reformulated gasoline or 80.101(d) for conventional gasoline provided the importer meets the requirements specified in this section.

(a) GTAB must be included in the compliance calculations for gasoline produced at a refinery operated by the same person that is the importer (the "GTAB importer-refiner").

(b) The GTAB importer-refiner may not transfer title to GTAB to another person until the GTAB has been used to produce gasoline and all refinery standards and requirements have been met for the gasoline produced.

(c) The refinery at which GTAB is used to produce gasoline must be physically located at the same terminal at which the GTAB is first discharged upon arrival in the United States (the import facility), or at a facility to which the GTAB is directly transported from the import facility.

(d) GTAB must be completely segregated from any other gasoline, whether conventional or RFG, and including any gasoline tank bottoms, prior to the point of blending, and sampling and testing, in the refinery operation, except that:

(1) GTAB may be placed in a storage tank that contains other GTAB imported by that importer; or

(2) GTAB may be placed in a storage tank that contains gasoline provided that:

(i) The gasoline has the same designations under § 80.65(d) as the gasoline which will be produced using the GTAB;

(ii) The blending is performed in that storage tank; and

(iii) The properties and volume the gasoline produced using GTAB is determined in a manner that excludes the volume and properties of the gasoline.

(e) Each year that GTAB is used to produce gasoline, the GTAB importer-refiner must determine an adjusted baseline for the refinery where the GTAB is used to produce gasoline that would apply in the case of conventional gasoline standards under § 80.101(b) and reformulated gasoline standards under § 80.41(h)(2)(i) for all gasoline produced at that refinery for that year. The following formulas must be used to calculate the adjusted refinery

baseline where GTAB is used to produce conventional gasoline:

If  $(V_{\text{Ref}} - V_{\text{GTAB}}) > V_B$  ; then

$$AB_i = \frac{(V_{1990} * RB_i) + (V_{\text{CGTAB}} * IB_i) + ((V_a - V_{1990} - V_{\text{CGTAB}}) * SB_i)}{V_a}$$

If  $(V_{\text{Ref}} - V_{\text{GTAB}}) < V_B$  ; then

$$AB_i = \frac{((V_{\text{Conv}} - V_{\text{CGTAB}}) * RB_i) + (V_{\text{CGTAB}} * IB_i)}{V_{\text{Conv}}}$$

And the following formula must be used to calculate the adjusted refinery baseline where GTAB is used to produce RFG:

$$AB_i = \frac{(V_{\text{RGTAB}} * IB_i) + ((V_{\text{RFG}} - V_{\text{RGTAB}}) * RB_i)}{V_{\text{RFG}}}$$

Where:

- $AB_i$  = Adjusted baseline for parameter or emissions performance i.
- $V_{1990}$  = 1990 baseline volume for the refinery.
- $V_a$  = Volume of RFG, conventional gasoline and RBOB produced at the refinery during the year (averaging period) in question.

$V_{\text{RFG}}$  = Volume of RFG and RBOB produced at the refinery during the year in question.

$V_{\text{Conv}}$  = Volume of conventional gasoline produced at the refinery during the year in question.

$V_{\text{RGTab}}$  = Volume of GTAB used to produce conventional gasoline at the refinery during the year in question.

$V_{\text{CGtab}}$  = Volume of GTAB used to produce conventional gasoline at the refinery during the year in question.

$RB_i$  = 1990 refinery baseline for parameter or emissions performance  $i$ .

$IB_i$  = Baseline for parameter or emissions performance  $i$  that applies to the GTAB importer-refiner in its importer capacity.

$SB_i$  = Statutory baseline for parameter or emissions performance  $i$ .

(f)(1) The GTAB importer-refiner must complete all requirements for the GTAB at the time it is imported as if the GTAB were imported gasoline, including sampling and testing, independent sampling and testing for GTAB used to produce reformulated gasoline, record keeping and reporting.

(2) The volume and properties of GTAB that has been combined with other GTAB may be determined by subtracting the volume and properties of the GTAB in the tank prior to receipt of the new product, from the volume and properties of the GTAB in the tank subsequent to receipt of the new product.

(3) Any GTAB batch that is used in whole or in part to produce reformulated gasoline must be treated as imported reformulated gasoline for purposes of sampling and testing, and reporting, under paragraph (f)(1) of this section; except that the sampling and testing may be based on vessel composite samples without regard to whether the gasoline in individual ship compartments separately meets the reformulated gasoline downstream standards.

(4) Any reports to EPA for imported GTAB must identify the GTAB as such.

(5) Any GTAB that ultimately is not used to produce gasoline must be treated as newly imported gasoline, for which all required sampling and testing, record keeping and reporting must be accomplished, and the gasoline must be included in the GTAB importer-refiner's importer compliance calculations for the averaging period that includes the date this sampling and testing occurs.

27. Section 80.84 is added to subpart D to read as follows:

§ 80.84 Treatment of interface and transmix.

(a) Definitions. For purposes of this section, the following definitions apply:

(1) Interface: A quantity of petroleum product in a pipeline between two surrounding batches of petroleum product that consists of a mixture of the two surrounding batches.

(2) Transmix: An interface that consists of a mixture of gasoline and distillate fuel oil.

(b) Classification of interface. Interface shall be classified in the following manner:

(1) Interface mixtures of RFG or RBOB, and conventional gasoline shall be classified as conventional gasoline;

(2) Interface mixtures of VOC-controlled RFG and non-VOC-controlled RFG shall be classified as non-VOC-controlled RFG;

(3) Interface mixtures of VOC-controlled RFG for Region 1 and VOC-controlled RFG for Region 2 shall be classified as VOC-controlled RFG for Region 2 or as non-VOC-controlled RFG;

(4) Interface mixtures of RBOB and RFG shall be classified as RBOB; and

(5) Interface mixtures of gasoline and blendstock shall be classified as blendstock.

(c) Transmix Processing.

(1) Any person who separates transmix where the gasoline portion is classified as conventional gasoline shall exclude from compliance calculations under § 101 any gasoline or gasoline blendstock produced from the transmix.

(2) Any person who separates transmix where the gasoline portion is classified as reformulated gasoline shall meet all requirements and standards that apply to a refinery under 40 CFR subparts D and F with regard to the transmix operation, and shall include the transmix gasoline portion in compliance calculations for the refinery.

(d) Transmix Blending.

(1) Any person may blend transmix into conventional gasoline only if:

(i) The transmix results from normal pipeline operations;

(ii) (A) The transmix cannot be transported by pipeline or water to a transmix processing facility; or

(B) Transmix was blended at the terminal before 1995; and

(iii) The transmix is blended at a rate that does not exceed the greater of:



(A) The demonstrated blending rate at that terminal during 1994; or

(B) 0.25 percent by volume.

(2) Any person may blend transmix into reformulated gasoline only if:

(i) The transmix results from normal pipeline operations;

(ii) The transmix cannot be transported by pipeline or water to a transmix processing facility;

(iii) The transmix cannot be blended into conventional gasoline under paragraph (d)(1) of this section;

(iv) The transmix is blended at a rate that does not exceed 0.25 percent by volume; and

(v) After blending the reformulated gasoline is shown through sampling and testing to meet all applicable reformulated gasoline standards that apply at the terminal. This sampling and testing shall be at one of the following rates:

(A) In the case of transmix that is blended in a storage tank, following each occasion transmix is blended; or

(B) In the case of transmix that is blended in-line, at least twice each calendar month during which transmix is blended.

28. Section 80.91 is amended by:

- a. Revising paragraph (d)(3) and adding paragraph (d)(5)(iii);
  - b. Adding paragraph (e)(1)(iii);
  - c. Revising paragraph (f)(2)(ii) introductory text;
  - d. Revising paragraphs (f)(2)(ii)(D), (f)(2)(ii)(E), and (f)(2)(ii)(F);
  - e. Revising paragraph (f)(2)(ii)(G) introductory text;
  - f. Removing paragraphs (f)(2)(ii)(G)(1) and (f)(2)(ii)(G)(2);
  - g. Revising paragraph (f)(2)(ii)(H) introductory text;
  - h. Revising paragraphs (f)(2)(ii)(H)(1) and (f)(2)(ii)(H)(2);
  - i. Removing paragraph (f)(2)(ii)(H)(3);
  - j. Adding paragraph (f)(2)(ii)(I) introductory text;
- and
- k. Adding paragraphs (f)(2)(ii)(I)(1), (f)(2)(ii)(I)(2), (f)(2)(ii)(I)(3), and (f)(2)(ii)(I)(4).

The revisions, additions, and deletions are set out to read as follows:

§80.91 Individual baseline determination

\* \* \* \* \*

(d) \* \* \*

(3) Negligible quantity sampling. Post-1990 testing of a blendstock stream for a fuel parameter listed in this

paragraph (d)(3) is not required if the refiner can show, through engineering judgement or past experience, that the fuel parameter exists in the stream at less than or equal to the amount, on average, shown in this paragraph (d)(3) for that fuel parameter. Any fuel parameter shown to exist in a refinery stream in negligible amounts shall be assigned a value of 0.0 or the negligible amount shown below at the refiner's discretion:

Aromatics, volume percent - 1.0

Benzene, volume percent - 0.15

Olefins, volume percent - 1.0

Oxygen, weight percent - 0.2

Sulfur, ppm - 30.0

\* \* \* \* \*

(5) \* \* \*

(iii) If a refiner measures a blendstock stream for aromatics, benzene, olefins, oxygen, or sulfur content and discovers that the measured component level of that stream is below the applicable range for the test method used, the low end of the applicable range may be substituted for the actual measured value in the baseline determination. This paragraph (d)(5)(iii) is not applicable to blendstock streams that have not been explicitly measured.

\* \* \* \* \*

(e) \* \* \*

(1)\* \* \*

(iii) For facilities determined to be closely integrated gasoline producing facilities and for which EPA has granted a single set of baseline fuel parameter values per this paragraph (e)(1):

(A) All reformulated gasoline and anti-dumping standards shall be met by such closely integrated facilities on an aggregate basis;

(B) A combined facility registration shall be submitted under §§ 80.76 and 80.103; and

(C) Record keeping requirements under §§ 80.74 and 80.104 and reporting requirements under §§ 80.75 and 80.105 shall be met for such closely integrated facilities on an aggregate basis.

\* \* \* \* \*

(f) \* \* \*

(2) \* \* \*

(ii) If the baseline fuel value for aromatics, olefins, benzene, and/or sulfur (determined per paragraph (e) of this section) is higher than the high end of the valid range limits specified in §80.42(c)(1) if compliance is being determined under the Simple Model, or in §80.45(f)(1)(ii) if compliance is being determined under the Complex Model, then the valid range limits may be extended for conventional gasoline in the following manner:

\* \* \* \* \*

(D) The new high end of the valid range for sulfur is determined from the following equation:

$$\text{NSULLIM} = \text{SULBASE} + 50 \text{ ppm}$$

where

NSULLIM = The new high end of the valid range limit for sulfur, in parts per million

SULBASE = The seasonal baseline fuel value for sulfur, in parts per million

(E) The extension of the valid range is limited to the applicable summer or winter season in which the baseline fuel values for aromatics, olefins, benzene, and/or sulfur exceed the high end of the valid range as described in paragraph (f)(2)(ii) of this section. Also, the extension of the valid range is limited to use by the refiner whose baseline value for aromatics, olefins, benzene, and/or sulfur was higher than the valid range limits as described in paragraph (f)(2)(ii) of this section.

(F) Any extension of the Simple Model valid range limits is applicable only to the Simple Model. Likewise any extension of the Complex Model valid range limits is applicable only to the Complex Model.

(G) The valid range extensions calculated in paragraphs (f)(2)(ii)(A), (B), (C), and (D) of this section are

applicable to both the baseline fuel and target fuel for the purposes of determining the compliance status of conventional gasolines. The extended valid range limit represents the maximum value for that parameter above which fuels cannot be evaluated with the applicable compliance model.

(H) Under the Simple Model, baseline and compliance calculations shall subscribe to the following limitations:

(1) If the aromatics valid range has been extended per paragraph (f)(2)(ii)(A) of this section, an aromatics value equal to the high end of the valid range specified in §80.42(c)(1) shall be used for the purposes of calculating the exhaust benzene fraction.

(2) If the fuel benzene valid range has been extended per paragraph (f)(2)(ii)(C) of this section, a benzene value equal to the high end of the valid range specified in §80.42(c)(1) shall be used for the purposes of calculating the exhaust benzene fraction.

(I) Under the Complex Model, baseline and compliance calculations shall subscribe to the following limitations:

(1) If the aromatics valid range has been extended per paragraph (f)(2)(ii)(A) of this section, an aromatics value equal to the high end of the valid range specified in §80.45(f)(1)(ii) shall be used for the purposes of calculating emissions performances.

(2) If the olefins valid range has been extended per paragraph (f)(2)(ii)(B) of this section, an olefins value equal to the high end of the valid range specified in §80.45(f)(1)(ii) shall be used for the target fuel for the purposes of calculating emissions performances.

(3) If the benzene valid range has been extended per paragraph (f)(2)(ii)(C) of this section, a benzene value equal to the high end of the valid range specified in §80.45(f)(1)(ii) shall be used for the target fuel for the purposes of calculating emissions performances.

(4) If the sulfur valid range has been extended per paragraph (f)(2)(ii)(D) of this section, a sulfur value equal to the high end of the valid range specified in §80.45(f)(1)(ii) shall be used for the target fuel for the purposes of calculating emissions performances.

\* \* \* \* \*

29. Section 80.101 is amended by:

- a) Revising paragraphs (b)(2) and (b)(3);
- b) Adding paragraph (d)(4)(iii);
- c) Revising paragraph (f);
- d) Revising paragraph (g);
- e) Revising paragraphs (h)(1)(ii) and (h)(4);
- f) Revising paragraphs (i)(1)(i)(C), (i)(1)(iii), (i)(2), (i)(3), and (i)(4);

g) Adding paragraph (j), to read as follows:

§ 80.101 Standards applicable to refiners and importers.

\* \* \* \* \*

(b) \* \* \*

(2) Optional complex model standards. Annual average levels of exhaust benzene emissions, weighted by volume weighted for each batch and calculated using the applicable complex model under § 80.45, shall not exceed the refiner's or importer's compliance baseline for exhaust benzene emissions.

(3) Complex model standards.

(i) Annual average levels of exhaust toxics emissions and NOx emissions, weighted by volume for each batch and calculated using the applicable complex model under § 80.45, shall not exceed the refiner's or importer's compliance baseline for exhaust toxics emissions and NOx emissions, respectively.

(ii) On a per-gallon basis,

(A) No conventional gasoline may have properties that are outside the complex model acceptable range limits specified at § 80.45(f)(1)(ii); except that

(B) For a refinery with a baseline parameter value that is outside the acceptable range limits, the value of this parameter for gasoline produced at this refinery shall not exceed the value determined in § 80.91(f)(2) .



\* \* \* \* \*

(d) \* \* \*

(4) \* \* \*

(iii) Where oxygenate is included in a refinery's or importer's compliance calculations, only the oxygenate volume, excluding denaturant, water and impurities, shall be included in the compliance calculations.

\* \* \* \* \*

(f) Compliance baseline determination. The compliance baseline for any refinery or importer, for each parameter or emissions performance, and for each averaging period, shall be calculated as follows.

(1) Calculate the refinery's or importer's averaging period volume ( $V_a$ ) as the total volume of the following products produced, imported or blended during the averaging period:

(i) Conventional gasoline;

(ii) Oxygenates blended with conventional gasoline downstream if allowed under paragraph (d)(4)(ii) of this section;

(iii) Reformulated gasoline; and

(iv) RBOB

(v) Oxygenates added to RBOB as determined under § 80.65(e)(1)(ii); and

(vi) California gasoline as defined in § 80.81(a)(2).

(2) Calculate the baseline to averaging period volume ratio (VR) using the following equation:

$$VR_a = \frac{V_{1990}}{V_a}$$

where

$VR_a$  = baseline to averaging period volume ratio for averaging period a

$V_{1990}$  = the refinery's or importer's 1990 baseline volume as determined in § 80.91(f)(1)

$V_a$  = the averaging period volume as calculated in paragraph (f)(1) of this section

(3) If  $VR_a$  is equal to or greater than 1, the refinery's or importer's compliance baseline shall be the baseline as determined in § 80.91(f)(1).

(4) If  $VR_a$  is less than 1, the refinery's or importer's compliance baseline shall be calculated using the following equation:

$$CB_i = (B_i \times VR_a) + (DB_i \times (1 - VR_a))$$

where

$CB_i$  = compliance baseline for parameter or emissions performance i

$B_i$  = the refinery's or importer's baseline for  
parameter or emissions performance i

$DB_i$  = the statutory baseline for parameter or emissions  
performance i in §§ 80.91(c)(5)(iii) and (iv)

(g) Compliance calculations.

(1) Determination of batch parameter and emissions  
performance values.

(i) In the case of each batch subject to the simple  
model standards, determine the values for sulfur, T-90,  
olefins, benzene, and aromatics as specified in paragraph  
(i) of this section.

(ii) In the case of each batch subject to the early  
complex or complex model standards:

(A) Determine the values for each parameter required  
under the complex model as specified in paragraph (i) of  
this section;

(B) In the case of each batch subject to the early  
complex model standards, calculate the exhaust benzene  
emissions using the complex model in § 80.45; and

(C) In the case of each batch subject to the complex  
model standards, calculate the exhaust toxics and NOx  
emissions using the complex model in § 80.45.

(2) Compliance determinations.

(i) Refineries and importers with an individual  
baseline. In the case of any refinery or importer subject

to an individual baseline, for each parameter or emissions performance subject to a standard under paragraph (b) of this section:

(A) Except exhaust benzene emissions under the simple model, calculate the annual average parameter value, or annual average emissions performance in mg/mi, using the following formula:

$$P_a = \left( \frac{\sum_{i=1}^n (V_i \times P_i)}{\sum_{i=1}^n V_i} \right)$$

where

$P_a$  = annual average value for parameter or emissions performance

$V_i$  = volume of batch i

$P_i$  = parameter or emissions performance for batch i

i = each batch of gasoline or blendstock included in a refinery's or importer's compliance calculations under paragraph (d) of this section

(B) In the case of exhaust benzene emissions under the simple model calculate the annual average value using the following formula:

$$EXHBEN = 1.884 + (0.949 \times BZ) + (0.113 \times (AR - BZ))$$

where

EXHBEN = annual average simple model exhaust benzene emissions

BZ = annual average benzene content, calculated under paragraph (g)(2)(i)(A) of this section

AR = annual average aromatics content, calculated under paragraph (g)(2)(i)(A) of this section

(C) In order to achieve compliance the annual average value shall be equal to or less than the refinery's or importer's standard under paragraph (b) of this section.

(ii) Refineries and importers with the statutory baseline. In the case of any refinery or importer subject to the statutory baseline, for each parameter or emissions performance subject to a standard under paragraph (b) of this section:

(A) Calculate the compliance total based on the standard under paragraph (b) of this section for each parameter, or emissions performance in mg/mi, using the formula in § 80.67(g)(1)(i).

(B) Calculate the actual total for each parameter, or emissions performance in mg/mi, for the gasoline and blendstocks under paragraph (d) of this section, using the formula in § 80.67(g)(1)(ii).

(C) In order to achieve compliance the actual total shall be equal to or less than the compliance total.

(3) Additional compliance requirements.

(i) Any calculations involving sulfur content or wt% oxygen shall be adjusted for specific gravity.

(ii) The emissions performance of gasoline that is intended for use in an area subject to an RVP standard in § 80.27 during the period such standard applies and that meets this RVP standard shall be determined using the "summer" complex model. The emissions performance of all other gasoline shall be determined using the "winter" complex model.

(4) Oxygen election for NO<sub>x</sub>.

(i) For the 1998 and 1999 averaging periods, any refiner for a refinery, or any importer, may elect to determine compliance with the NO<sub>x</sub> emissions performance standard:

(A) With oxygenates added downstream from the refinery under § 80.91(e)(4) included in the compliance calculations, and a baseline NO<sub>x</sub> emissions performance that includes oxygenate; or

(B) With such oxygenates excluded from compliance calculations, and a baseline NO<sub>x</sub> emissions performance that excludes oxygenate.

(ii) The election under paragraph (g)(4)(i) of this section for 1999 shall apply for all subsequent averaging periods.

(5) Exclusion of previously certified gasoline and blendstock.

(i) Any refiner who uses previously certified reformulated or conventional gasoline, or blendstock that previously has been included in compliance calculations under § 80.102(e)(2), to produce gasoline at a refinery, shall exclude the previously certified gasoline and blendstock for purposes of demonstrating compliance with the standards under § 80.101(b).

(ii) In order to accomplish the exclusion required in paragraph (g)(5)(i) of this section, the refiner shall either:

(A) Determine the volume and properties of blendstock used at the refinery, and use the compliance calculation procedures in paragraph (g)(5)(iii) of this section; or

(B) Determine the volume and properties of the previously certified gasoline and the previously certified blendstock used at the refinery, and the volume and properties of gasoline produced at the refinery, and use the compliance calculation procedures in paragraph (g)(5)(iv) of this section.

(iii)(A) Determine the volume and properties of each batch of blendstock used at the refinery, and of oxygenate blended with a refinery's gasoline under paragraph (d)(4)(ii) of this section, with the exception of previously certified blendstock, using the procedures in paragraph (i) of this section.

(B) Determine the blendstock volume fraction (F) based on the volume of blendstock, and the volume of gasoline with which the blendstock is blended, using the following equation:

$$F = \frac{V_b}{V_b + V_g}$$

where

F = blendstock volume fraction

V<sub>b</sub> = volume of blendstock

V<sub>g</sub> = volume of gasoline with which the blendstock is blended.

(C) For each parameter required by the complex model, calculate the parameter value that would result by combining, at the blendstock volume fraction (F), the blendstock with a gasoline having properties equal to the refinery's or importer's baseline, using the following formula:



$$CP_j = \frac{(BAP_j \times V_g) + (BLP_j \times V_b)}{V_g + V_b}$$

where

$CP_j$  = calculated value for parameter  $j$

$BAP_j$  = baseline value for parameter  $j$

$BLP_j$  = value of parameter  $j$  for the blendstock

$j$  = each parameter required by the complex model

(1) The baseline value shall be the refinery's "summer" or "winter" baseline, based on the "summer" or "winter" classification of the gasoline produced as determined under paragraph (g)(3)(iii) of this section. In the case of a refinery that is aggregated under paragraph (h) of this section, the refinery baseline shall be used, and not the aggregate baseline.

(2) The sulfur content and oxygen wt% adjustment required under paragraph (g)(3)(i) of this section shall use a gasoline specific gravity of 0.749 for "summer" gasoline and of 0.738 for "winter" gasoline.

(3) In the case of "summer" gasoline, where the blendstock is ethanol and the volume fraction calculated under paragraph (g)(5)(iii)(B) is equal to or greater than 0.015, the value for RVP shall be 1.0 psi greater than the

RVP calculated using the equation in this paragraph

(g)(5)(iii)(C).

(D) Using the summer or winter complex model, as appropriate, calculate the exhaust toxics and NOx emissions performance, in mg/mi, of:

(1) A hypothetical gasoline having properties equal to those calculated in paragraph (g)(5)(iii)(C) of this section (HEP); and

(2) A gasoline having properties equal to the refinery's or importer's baseline (BEP).

(E) Calculate the exhaust toxics and NOx equivalent emissions performance (EEP) of the blendstock, in mg/mi, using the following equation:

$$EEP_j = \frac{BEP_j - (HEP_j * (1 - F))}{F}$$

where

EEP<sub>j</sub> = equivalent emissions performance of the blendstock for emissions performance j

BEP<sub>j</sub> = emissions performance j of a gasoline having the properties of the refinery's baseline.

HEP<sub>j</sub> = emissions performance j of a hypothetical blendstock/gasoline blend

F = blendstock volume fraction

j = exhaust toxics or NOx emissions performance

(F) For each blendstock batch, the volume, and exhaust toxics and NOx equivalent emissions performance (EEP), shall be included in the refinery's compliance calculations.

(G)(1) The portions of a blendstock batch used to produce "summer" and "winter" gasoline, as determined in paragraph (g)(3)(iii) of this section, shall be treated as separate batches for purposes of this paragraph (g)(5)(iii).

(2) In the case of oxygenates or butane blended with a refinery's gasoline under paragraph (d)(4)(ii) of this section, the oxygenate or butane volume blended during a maximum of one month may be treated as a single batch for purposes of this paragraph (g)(5)(iii).

(iv)(A) For each batch of previously certified gasoline or blendstock received that is used to produce conventional gasoline:

(1) Determine the volume and properties using the procedures in paragraph (i) of this section;

(2) In the case of previously certified gasoline, determine the exhaust toxics and NOx emissions performance using the summer or winter complex model, as appropriate.

(3) In the case of previously certified blendstock, determine the exhaust toxics and NOx equivalent emissions performance using the procedures in paragraph (g)(5)(iii) of this section.

(4) Include the volume and emissions performance, as a negative volume and a negative emissions performance, in the refinery's compliance calculations for exhaust toxics and NOx.

(B) Determine the volume and properties, and exhaust toxics and NOx emissions performance, for each batch of conventional gasoline produced at the refinery using previously certified gasoline or blendstock, and include each batch in the refinery's compliance calculations for exhaust toxics and NOx without regard to the presence of previously certified gasoline or blendstock in the batch.

(h) Refinery grouping for determining compliance.

(1) \* \* \*

(ii) Elect to achieve compliance on an aggregate basis for a group, or for groups, of one or more refineries, provided that:

(A) Compliance is achieved for each refinery separately or as part of a group;

(B) The data for any refinery is included in only one compliance calculation;

and

(C) Where more than one person meets the definition of refiner for a refinery, the refinery may not be aggregated with any other refinery unless the same persons meet the

definition of refiner for . each refinery in the aggregation.

\* \* \* \* \*

(4) Where any refinery that has been included in an aggregation is transferred to another refiner, or is shut down:

(i) The aggregation requirements and baselines calculated under § 80.91(f)(4) shall apply;

(ii) The aggregated baseline for the refiner who transfers or shuts down the refinery shall be calculated for the averaging period during which the refinery is transferred or is shut down using an adjusted baseline

volume for the refinery calculated using the following equation:

$$ABV = BV * \frac{Days}{365}$$

where:

ABV = adjusted baseline volume

BV = baseline volume for the transferred or shut down refinery

Days = number of days during the averaging period the party was the refiner of the refinery or that the refinery was in operation

(iii) In the case of a transferred refinery:

(A) The new refiner's aggregation election shall be made for the averaging period during which the refinery is transferred, and shall apply for all subsequent averaging periods;

(B) If the new refiner elects to aggregate the refinery, the aggregated baseline for the new refiner shall be calculated for the averaging period during which the refinery is transferred using an adjusted baseline volume for the transferred refinery calculated using the equation in paragraph (h)(4)(ii) of this section; and

(C) Each refiner of a transferred refinery shall demonstrate compliance for the gasoline produced during the period it was the refiner of the refinery.

(i) Sampling and Testing.

(1) \* \* \*

(i) \* \* \*

(C) Sampling under this paragraph (i)(1)(i) shall follow the requirements of § 80.47.

\* \* \* \* \*

(iii) Retain a minimum of 330 ml of every sample analyzed under paragraph (i)(1)(i)(A) of this section for not less than 30 days from the date of production or import, and provide this remaining sample to the Administrator's authorized representative upon request.

(2) In the case of oxygenate that is included in a refinery's compliance calculations under paragraph (d)(4) of this section the refiner may use the properties of the pure oxygenate instead of sampling and testing each oxygenate batch, provided that the refiner obtains documents from the oxygenate supplier that state the purity of any oxygenate used.

(3) An importer who imports conventional gasoline into the United States by truck may meet the sampling and testing requirements under paragraph (i)(1) of this section as follows.

(i) The imported conventional gasoline must meet the applicable conventional gasoline standards, specified under paragraph (b) of this section, on an every-gallon basis.

(ii) The optional complex model standards and the complex model standards, under paragraphs (b)(2) and (3) of this section:

(A) May be met separately for "summer" gasoline and for "winter" gasoline, as defined in paragraphs (g)(5) and (6) of this section, based on the baselines applicable to the importer for these two periods; or

(B) May be met for all gasoline during a calendar year on the basis of the annual baseline applicable to the importer.

(iii)(A) The importer must demonstrate that every gallon of imported gasoline meets the applicable conventional gasoline standards, through test results of samples of the gasoline contained in the storage tank from which the trucks used to transport gasoline into the United States are loaded.

(B) The frequency of this sampling and testing must be subsequent to each receipt of gasoline into the storage tank, or immediately prior to each transfer of gasoline to the importer's truck.



(C) The testing must be for each applicable parameter specified under § 80.65(e)(2)(i), using the test methods specified under § 80.46.

(D) The importer must obtain a copy of the terminal test results that reflects the quality of each truck load of gasoline that is imported into the United States.

(iv)(A) The importer must conduct separate programs of periodic quality assurance sampling and testing of the gasoline obtained from each truck-loading terminal, to ensure the accuracy of the terminal test results.

(B) The quality assurance samples must be obtained from the truck-loading terminal by the importer, and terminal operator may not know in advance when samples are to be collected.

(C) The importer must test each sample (or use a laboratory that is independent under § 80.65(f)(2)(iii) to test the sample) for the parameters specified under § 80.65(e)(2)(i) using the test methods specified under § 80.46, and the results must correlate with the terminal's test results within the ranges specified under § 80.65(e)(2)(i).

(D) The frequency of quality assurance sampling and testing must be at least one sample for each fifty of an importer's trucks that are loaded at a terminal, or one sample per month, whichever is more frequent.

(v) The importer must treat each truck load of imported gasoline as a separate batch for purposes of assigning batch numbers under § 80.101(i), record keeping under § 80.104, and reporting under § 80.105.

(vi) EPA inspectors or auditors, and auditors conducting attest engagements under subpart F, must be given full and immediate access to the truck-loading terminal and any laboratory at which samples of gasoline collected at the terminal are analyzed, and be allowed to conduct inspections, review records, collect gasoline samples, and perform audits. These inspections or audits may be either announced or unannounced.

(vii) In the event the requirements specified in paragraphs (i)(3)(i) through (vi) of this section are not met, in whole or in part, the importer shall immediately lose the option of importing gasoline under the terms of this paragraph (i)(3).

(4) A refiner who produces gasoline by blending butane into conventional gasoline may meet sampling and testing requirements of paragraph (i)(1) of this section as follows:

(i) Commercial grade butane is defined as butane for which test results demonstrate the butane is 95% pure and has the following properties:

olefins      $\leq$  1.0 vol%

aromatics  $\leq$  2.0 vol%

benzene  $\leq$  0.03 vol%

sulfur  $\leq$  140 ppm

(ii) Non-commercial grade butane is defined as butane for which test results demonstrate the butane has the following properties:

olefins  $\leq$  10.0 vol%

aromatics  $\leq$  2.0 vol%

benzene  $\leq$  0.03 vol%

sulfur  $\leq$  140 ppm

(iii) Any refiner who blends butane for which the refiner has documents from the butane supplier which demonstrate the butane is commercial grade shall include the butane in compliance calculations based on the properties specified in paragraph (i)(4)(i) of this section;

(iv) Any refiner who blends butane for which the refiner has documents from the butane supplier which demonstrate the butane is non-commercial grade shall include the butane in compliance calculations based on the properties specified in paragraph (i)(4)(ii) of this section, provided the refiner:

(A) Conducts a quality assurance program of sampling and testing the butane obtained from each separate butane supplier that demonstrate the butane has the properties specified under paragraph (i)(4)(ii) of this section; and

(B) The frequency of butane sampling and testing for the butane received from each butane supplier must be one sample for every 50,000 gallons of butane received, or one sample every three months, whichever is more frequent; and

(v) When butane is blended under this paragraph (i)(4) during the period May 1 through September 15 the refiner shall demonstrate through sampling and testing that any gasoline blended with butane meets the volatility standards specified under 40 CFR § 80.27.

(vi) Butane that is blended during a period of up to one month may be included in a single batch for purposes of reporting to EPA, however, commercial grade butane and non-commercial grade butane shall be reported as separate batches.

(j) Evasion of standards through exporting and importing gasoline. Notwithstanding the requirements of this section, no refiner or importer shall export gasoline and import the same or other gasoline for the purpose of evading a more stringent baseline requirement.

30. Section 80.102 is amended by:

a) Adding introductory text;

b) Revising the introductory text of paragraph (a) and revising paragraphs (a)(1)(viii) and (a)(2), and adding paragraph (a)(3);

c) Revising the first sentence of paragraphs (b)(1) and (c);

d) Revising the introductory text of paragraphs (d)(1) and (d)(2); revising paragraphs (d)(1)(i) and (d)(2)(i); revising paragraph (d)(3)(iv) and (d)(3)(v); and adding paragraphs (d)(3)(vi) and (d)(3)(vii);

e) Revising the introductory text of paragraphs (e)(1) and (e)(2) and revising paragraphs (e)(2)(i) and (e)(3);

f) Revising the introductory text of paragraph (f)(1) and revising paragraph (f)(1)(i);

g) Revising paragraph (g), to read as follows:

§ 80.102 Controls applicable to blendstocks

The requirements of this section shall be met separately for each refinery by the refiner, and by each importer.

(a) For the purposes of this subpart E the following classifications apply.

(1) \* \* \*

(viii) Dimate; except that

(2) No petroleum product shall be considered "applicable blendstocks" if it has an initial boiling point that is less than 75 °F or a boiling end point that is greater than 450 ° F; and

(3) Any gasoline blendstock with properties such that, if oxygenate only is added to the blendstock the resulting

blend meets the definition of gasoline under § 80.2(c), shall be considered gasoline.

(b) (1) Determine the baseline blendstock-to-gasoline ratio for each calendar year 1990 through 1993 using the following formula: \* \* \*

\* \* \* \* \*

(c) Determine the cumulative blendstock-to-gasoline ratio using the following formula: \* \* \*

\* \* \* \* \*

(d)(1) For each averaging period:

(i) \* \* \*

$V_g$  = Volume of conventional gasoline, oxygenates blended downstream under § 80.101(d)(4)(ii), reformulated gasoline and RBOB, including oxygenates added to RBOB as determined under § 80.65(e)(1)(ii), produced or imported during the averaging period, excluding California gasoline as defined in § 80.81(a)(2).

\* \* \* \* \*

(2) Beginning on January 1, 1998, for each averaging period:

(i) \* \* \*

$V_{g,i}$  = Volume of conventional gasoline, oxygenates blended downstream under § 80.101(d)(4)(ii), reformulated gasoline and RBOB, including oxygenates added to RBOB as

determined under § 80.65(e)(1)(ii), produced or imported during averaging i, excluding California gasoline as defined in § 80.81(a)(2).

\* \* \* \* \*

(3) \* \* \*

(iv) Transferred between refineries that have been aggregated under § 80.101(h);

(v) Used to produce California gasoline as defined in § 80.81(a)(2);

(vi) Sold at a price that is not less than 100% greater than the average price of the refinery's regular grade conventional gasoline when sold in bulk during the same month; or

(vii) Tendered in a volume not exceeding 1,000 gallons.

(e)(1) The blendstock-to-gasoline ratio percentage change threshold shall have been exceeded if:

\* \* \* \* \*

(2) Any refiner for a refinery, or any importer, that exceeds the blendstock-to-gasoline ratio percentage change threshold shall, without further notification:

(i) Include all blendstocks, except blendstocks that meet the criteria for exclusion under paragraph (d)(3) of this section, produced or imported and transferred to others in its compliance calculations under § 80.101 for two averaging periods beginning on January 1 of the averaging

period subsequent to the averaging period when the exceedance occurs;

\* \* \* \* \*

(3) Any refiner for a refinery, or any importer, that has previously exceeded the blendstock-to-gasoline ratio percentage change threshold, and subsequently exceeds the threshold for an averaging period and is not granted a waiver pursuant to paragraph (f)(2)(i) of this section, shall, without further notification, meet the requirements specified in paragraphs (e)(2)(i) through (iii) of this section for four averaging periods, beginning on January 1 of the averaging period following the averaging period when the subsequent exceedance occurs.

(f)(1) The refinery or importer blendstock accounting requirements specified under paragraph (e) of this section shall not apply in the case of any refinery or importer:

(i) Whose 1990 baseline value for each regulated fuel property and emissions performance as determined in accordance with §§ 80.91 and 80.92, is equal to or less stringent than the anti-dumping statutory baseline value for that parameter or emissions performance;

\* \* \* \* \*

(g) Notwithstanding the requirements of paragraphs (a) through (f) of this section, any refiner for a refinery, or any importer, who transfers applicable blendstocks to



another refinery or importer with a less stringent baseline, either directly or indirectly, for the purpose of evading a more stringent baseline requirement, shall include such blendstock(s) in determining compliance with the applicable requirements of this subpart.

31. Section 80.104 is amended by revising paragraphs (a)(1)(i), (a)(1)(ii), (a)(2)(i), (a)(2)(iv), (a)(2)(ix) and (a)(2)(x), and adding paragraphs (a)(2)(xi) and (a)(2)(xii) to read as follows:

§ 80.104 Record keeping requirements

\* \* \* \* \*

(a) \* \* \*

(1) \* \* \*

(i) Each batch of conventional gasoline produced; and

(ii) Each batch of blendstock that is included in compliance calculations.

(2)(i)(A) The result of tests performed in accordance with § 80.101(i) as originally printed by the testing apparatus, or where no printed result is generated by the testing apparatus, the results as originally recorded by the person who performed the tests; and

(B) Any record that contains results for the tests that are not identical to the results recorded in paragraph (a)(2)(i)(A) of this section; and

\* \* \* \* \*

(iv) The date of production, importation, blending or receipt;

\* \* \* \* \*

(ix) In the case of any refinery-produced or imported products listed in § 80.102(a) that are excluded under § 80.102(d)(3), documents that demonstrate the basis for exclusion;

(x) In the case of oxygenate that is added by a person other than the refiner or importer under §80.101(d)(4)(ii)(B), documents that support the volume of oxygenate claimed by the refiner or importer, including the contract with the oxygenate blender and records relating to the audits, sampling and testing, and inspections of the oxygenate blender operation; and

(xi) In the case of any imported GTAB, documents that reflect the physical movement of the GTAB from the point of importation to the point of blending to produce gasoline.

(xii) In the case of refiners who blend butane into conventional gasoline, documents reflecting the volume and purity of butane blended.

\* \* \* \* \*

32. Section 80.105 is amended by revising (a)(5)(iv), removing paragraph (a)(5)(v), and revising paragraph (c) to read as follows:

§ 80.105 Reporting requirements

(a) \* \* \*

(5) \* \* \*

(iv) The properties, except for oxygenates blended downstream of the refinery or import facility, pursuant to § 80.101(i); and

\* \* \* \* \*

(c) For each averaging period, each refiner and importer shall cause to be submitted to the Administrator of EPA, by May 31 of each year, a report in accordance with the requirements for Attest Engagements of §§ 80.125 through 80.131 for each refinery and for each importer.

\* \* \* \* \*

33. Section 80.106 is amended by revising the introductory text of paragraph (a)(1), revising paragraph (a)(1)(vi), removing paragraph (a)(1)(vii), and adding paragraph (a)(3) to read as follows:

§ 80.106 Product Transfer Documents

(a)(1) On each occasion when any person transfers custody or title to any conventional gasoline, other than when gasoline is transferred to a retail outlet or wholesale

purchaser-consumer facility located outside any covered area, or is sold or dispensed for use in motor vehicles at a retail outlet or wholesale purchaser-consumer facility, the transferor shall provide to the transferee documents that include the following information:

\* \* \* \* \*

(vi)(A) The following statement: "This product does not meet the requirements for reformulated gasoline, and may not be used in any reformulated gasoline covered area."

(B) With the exception of custody transfers to truck carriers, retail outlets and wholesale purchaser-consumer facilities, the statement required in paragraph (a)(vi) of this section may be in the form of product codes, provided that:

(1) The codes are standardized for the distribution system in which they are used; and

(2) The transferee is given the information necessary to interpret the codes.

\* \* \* \* \*

(3) The information required in this paragraph (a) shall be transferred:

(i) No later than the time of the transfer in the case of transfers of custody; and

(ii) Within thirty days following the transfer in the case of transfers of title.

\* \* \* \* \*

34. Section 80.125 is amended by adding paragraphs (a)(1) through (a)(4) to read as follows:

§ 80.125 Attest engagements.

(a) \* \* \*

(1) In the case of any refiner or importer of reformulated or conventional gasoline, the attest procedures in § 80.133 shall be completed, or, prior to the 1998 reporting period, the attest procedures in § 80.128 may be completed as an alternative to the attest procedures in § 80.133.

(2) In the case of any oxygenate blender who meets the oxygen standard on average, the attest procedures in § 80.134 shall be completed, or, prior to the 1998 reporting period, the attest procedures in § 80.129 may be completed as an alternative to the § 80.134 attest procedures.

(3) In the case of any importer who imports any gasoline classified as GTAB under § 80.83, the attest procedures in § 80.131 shall be completed.

(4) In the case of any refiner who produces reformulated gasoline under an in-line blending waiver from independent sampling and testing under § 80.65(f), the attest procedures in § 80.132 shall be completed.

\* \* \* \* \*

35. Section 80.126 is amended by adding paragraphs (h), (i), (j), (k), (l), (m), (n), and (o) to read as follows:

§ 80.126 Definitions.

\* \* \* \* \*

(h) Attestor means the CPA or CIA performing the agreed-upon procedures engagement under this subpart.

(i) Foot (or crossfoot) means to add a series of numbers, generally in columns (or rows), to a total amount. When applying the attestation procedures in this subpart F, the attestor may foot to subtotals on a sample basis in those instances where subtotals (e.g., page totals) exist. In such instances, the total should be footed from the subtotals and the subtotals should be footed on a test basis using no less than 25% of the subtotals.

(j) Gasoline Treated as Blendstock, or GTAB, means imported gasoline that is excluded from the import facility's compliance calculations, but is treated as blendstock in a related refinery that includes the GTAB in its refinery compliance calculations.

(k) Laboratory Analysis means the original test result for each analysis that was used to determine a product's properties. Original test result means the document in which a test result is first recorded, and not a transcribed version of the test result. For laboratories using test

methods that must be correlated to the standard test method, the correlation factors and results shall be included as part of the laboratory analysis. For refineries or importers that produce reformulated gasoline or RBOB and use the 100% independent lab testing, the laboratory analysis shall consist of the results reported to the refinery or importer by the independent lab. Where assumed properties are used (e.g., for butane) the assumed properties may serve as the test results. In the case of attest engagements for in-line blending operations under § 80.132, the term laboratory analysis shall include both the "primary analysis" results under § 80.132(c) and the "confirmatory analysis" results under § 80.132(d).

(l) Non-finished-gasoline petroleum products means liquid petroleum products that have boiling ranges greater than 75 degrees Fahrenheit, but less than 450 degrees Fahrenheit, as per ASTM D86 or equivalent.

(m) Product Transfer Documents means copies of documents represented by the refiner/importer/oxygenate blender as having been provided to the transferee, and that reflect the transfer of ownership or physical custody of gasoline or blendstock (e.g., invoices, receipts, bills of lading, manifests, and/or pipeline tickets).

(n) Reporting Period means the time period relating to the reports filed with EPA by the refiner, importer, or oxygenate blender, and generally is the calendar year.

(o) Tender means the transfer of ownership or physical custody of a volume of gasoline or other petroleum product all of which has the same identification (reformulated gasoline, conventional gasoline, RBOB, and other non-finished-gasoline petroleum products), and characteristics (time and place of use restrictions for reformulated gasoline and RBOB).

36. Section 80.127 is amended by revising paragraph (a) to read as follows:

§80.127 Sample size guidelines

\* \* \* \* \*

(a) Sample items shall be selected in such a way as to comprise a [simple] random sample of each relevant population

(i) The relevant population may be treated as the entire population included in the annual averaging period, or

(ii) The relevant population may be treated as the aggregation of portions of the population stratified on a quarterly basis; and

\* \* \* \* \*



37. Section 80.128 is amended by revising the heading and introductory text; revising paragraphs (d)(2), (e)(2), (e)(4) and (e)(5); and removing (e)(6) and (f) to read as follows:

§ 80.128 Alternative agreed upon procedures for refiners and importers.

Prior to the attest report for the 1998 reporting period, the following minimum attest procedures may be carried out for a refinery or importer, in lieu of the attest procedures specified in § 80.132.

\* \* \* \* \*

(d)(2) Compare the product transfer documents' designation for consistency with the time and place, and compliance model designations for the tender (VOC-controlled or non-VOC-controlled, VOC region for VOC-controlled, OPRG versus non-OPRG, [summer or winter gasoline,] and simple or complex model certified; and

\* \* \* \* \*

(e) \* \* \*

(2) Determine that the requisite contract was in place with the downstream blender designating the required blending procedures, or that the refiner or importer accounted for the RBOB using the assumptions in § 80.69(a)(2);

\* \* \* \* \*

(4) Trace back to the batch or batches in which the RBOB was produced or imported. Obtain the refiner's or importer's internal lab analysis for each batch and agree the consistency of the type and volume of oxygenate required to be added to the RBOB with that indicated in the applicable tender's product transfer documents; and

(5) Agree the sampling and testing frequency of the refiner's or importer's downstream oxygenated blender quality assurance program with the sampling and testing rates as required in § 80.69(a)(7).

\* \* \* \* \*

38. Section 80.129 is amended by:

- a) Revising the heading and introductory text;
- b) Revising paragraph (a);
- c) Revising paragraphs (d)(3)(iii) and (d)(3)(iv), and removing paragraph (d)(3)(v); and
- d) Adding paragraph (f), to read as follows:

§ 80.129 Alternative agreed upon procedures for oxygenate blenders.

Prior to the attest report for the 1998 reporting period, the following minimum attest procedures may be carried out for an oxygenate blending facility that is subject to the requirements of this subpart F, in lieu of the attest procedures specified in § 80.134.

(a) Read the oxygenate blender's reports filed with EPA for the previous year as required by § 80.75.

\* \* \* \* \*

(d) \* \* \*

(3) \* \* \*

(iii) Recalculate the actual oxygen content based on the volumes blended and agree to the report to EPA on oxygen; and

(iv) Review the time and place designations in the product transfer documents prepared for the batch by the blender, for consistency with the time and place designations in the product transfer documents for the RBOB (e.g., VOC controlled or non-VOC controlled).

\* \* \* \* \*

(f) In the case of any oxygenate blender who meets the oxygen standard on average without separately sampling and testing each batch, under the terms of § 80.69(b)(5), the following procedures also shall be carried out.

(1) Obtain a listing of the oxygen compliance calculations, test the mathematical accuracy of the listing, and agree the volumetric calculations to the material balance analysis.

(2) Select a representative sample of the oxygen compliance calculations using the guidelines in § 80.127, and for each calculation selected:

(i) Confirm that the calculation represented gasoline production for a period no longer than one month;

(ii) Confirm that the oxygenate blender properly performed the calculation required in § 80.69(b)(5), including that the oxygenate blender used the proper values for specific gravities, mole fraction, and denaturant content; and

(iii) Agree the calculated oxygen value to the corresponding batch report to EPA.

(3) Obtain records of the oxygenate blender's quality assurance program of sampling and testing, as required in § 80.69(b)(5), select a representative sample of the quality assurance samples using the guidelines in § 80.127, and for each quality assurance sample selected, confirm the sample was collected within the required frequency.

39. Section 80.130 is amended by revising the heading and paragraphs (a) and (b), and adding paragraph (c) to read as follows:

§ 80.130 Agreed upon procedures record keeping and reporting.

(a) Reports. (1) The CPA or CIA shall issue to the refiner, importer, or blender a report summarizing the procedures performed and the findings in accordance with the attest engagement or internal audit performed in compliance

with this subpart. This report shall include the information specified below, or an explanation of why the information does not apply to the subject of the attest engagement.

(2) The name and registration number of the refiner, importer or oxygenate blender who is the subject of the attest engagement, and in the case of refineries and oxygenate blending facilities, the name and registration number.

(3) The name, address and telephone number of each CPA or CIA who participated in the conduct of the attest engagement, and the name of the CPA's firm if any.

(4)(i) The information required in this paragraph (a)(4) shall be reported separately for the following product types:

(A) Reformulated gasoline;

(B) Conventional gasoline;

(C) Non-finished-gasoline petroleum products, in the following categories:

(1) Applicable blendstock included in a party's blendstock tracking calculations pursuant to §§ 80.102(b) through (d);

(2) Applicable blendstock not included in a party's blendstock tracking calculations; and

(3) All other non-finished-gasoline petroleum products;

(D) RBOB designated for "any-oxygenate" and 2.0 weight percent oxygen;

(E) RBOB designated for "ether-only" and 2.0 weight percent oxygen;

(F) All other RBOB;

(G) Gasoline treated as blendstock;

(H) In the case of oxygenate blenders, oxygenate; and

(I) In the case of refiners with in-line blending waivers from independent sampling and testing, the gasoline produced using such an in-line blending operation, segregated into the categories specified in paragraphs (a)(4)(i)(A), (D), (E) and (F) of this section.

(ii) The volumes from:

(A) The inventory reconciliation analysis;

(B) The listing of tenders; and

(C) The listing of batches.

(iii) The number of tenders; and

(iv) The number of batches; and

(5) For each attest procedure specified in the relevant regulatory section:

(A) Identify the section number, and a statement that the procedure was performed or an explanation of why the procedure was not performed;

(B) On each occasion when a sample is selected in accordance with the guidelines in § 80.127, report the option under § 80.127 that was used to select the sample, the size of the population, the size of the sample, and the method used to ensure the sample was a simple random sample of the relevant population;

(C) Any information the attest procedure identifies to report, or to report as a finding; and

(D) The nature of each discrepancy found.

(b) Submission of reports to EPA. The refiner, importer, or blender shall provide a copy of the auditor's report to EPA within the times specified in §§ 80.65(f)(2)(ii)(C), 80.75(m) and 80.105(c).

(c) Document retention.

(1) The CPA or CIA shall retain all documents pertaining to the performance of each agreed upon procedure and pertaining to the creation to the agreed upon procedures report, or copies of such documents, including, but not limited to, the following documents:

(i) Documents that are reviewed as part of the attest engagement, including:

(A) Inventory reconciliation records;

(B) Product transfer documents; and

(C) Laboratory reports;

(ii) Documents that are prepared by the CPA or CIA as part of the attest engagement or in preparation of the attest engagement report, commonly called "work papers;"

(iii) Computer data and the results of computer programs that are used by the auditor to assist in the conduct of the attest engagement; and

(iv) Correspondence between the CPA or CIA and the refiner, importer or oxygenate blender on the subject of the attest engagement.

(2) The term document includes computer records where the information specified in paragraph (c)(1) of this section is in the form of computer records.

(3) The documents specified in paragraph (c)(1) of this section shall be retained by the CPA or CIA for a period of five years from the date the attest engagement report is submitted to EPA, and shall deliver such documents to the Administrator's authorized representative upon request.

40. Section 80.131 is added to subpart F to read as follows:

§ 80.131 Agreed upon procedures for GTAB, certain conventional gasoline imported by truck, previously certified gasoline used to produce gasoline, and butane blenders.



(a) Attest procedures for GTAB. The following are the attest procedures to be carried out in the case of an importer who imports gasoline classified as blendstock (or "GTAB") under the terms of § 80.83:

(1) Obtain a listing of all GTAB volumes imported for the reporting period. Agree the total volume of GTAB from the listing to the inventory reconciliation analysis under § 80.132.

(2) Obtain a listing of all GTAB batches reported to EPA by the importer. Agree the total volume of GTAB from the listing to the GTAB volumes reported to EPA. Note that the EPA report includes a notation that the batch is not included in the compliance calculations because the imported product is GTAB. Also, agree these volumes to the Import Summary received from the U.S. Customs Service.

(3) Select a sample, in accordance with the guidelines in § 80.127, from the listing of GTAB batches obtained in paragraph (a)(2) of this section, and for each GTAB batch selected perform the following:

(i) Trace the GTAB batch to the tank activity records. From the tank activity records, determine the volumes of conventional gasoline and of RFG produced. Agree the volumes from the tank activity records to the batch volume reported to the EPA as reformulated or conventional gasoline.

(ii) Agree the location of the refinery represented by the tank activity records obtained in paragraph (a)(3)(i) of this section for the gasoline produced from GTAB, to the location that the GTAB arrived in the U.S. or at a facility to which GTAB is directly transported from the import facility using records representing location (e.g., US Customs Service entry records). Using product transfer records, trace volumes transported from the import facility directly to the refinery as applicable.

(iii) Obtain tank activity records for all batches of GTAB received and blended. Using the tank activity records, determine whether the GTAB was received into an empty tank, or into a tank containing other GTAB imported by that importer or finished gasoline of the same category as the gasoline that will be produced using the GTAB.

(iv) Using the tank activity records obtained under paragraph (a)(3)(iii) of this section, determine the volume of any tank bottom (beginning tank inventory) that is previously certified gasoline before GTAB is added to the tank. Using lab reports, batch reports, or product transfer documents, determine the properties of the tank bottom.

(v) Determine whether the properties and volume of gasoline produced using GTAB were determined in a manner that excludes the volume and properties of any gasoline that

previously has been included in any refiners or importers compliance calculations, as follows:

(A) Note documented tank mixing procedures.

(B) Determine the volume and properties of the gasoline contained in the storage tank after blending is complete. Mathematically subtract the volume and properties of the previously certified gasoline to determine the volume and properties of the GTAB plus blendstock added. Agree the volume and properties of the GTAB plus blendstock added to the volume reported to EPA as a batch of gasoline produced; or

(C) In the alternative, using the tank activity records, note that only GTAB and blending components were combined, and that no gasoline was added to the tank. Agree the volumes and properties of the shipments from the tank after the GTAB and blendstock are added, blended, and sampled and tested, to the volumes and properties reported to the EPA by the refiner.

(vi) Obtain the importer's laboratory analysis for each batch of GTAB selected, and agree the properties listed in the corresponding batch report submitted to the EPA, to the laboratory analysis.

(b) Attest procedures for certain truck imports. The following procedures are to be carried out in the case of an importer who imports conventional gasoline into the United

States by truck using the sampling and testing option in § 80.101(i)(3) ("§ 101(i)(3) truck imports").

(1) Obtain a listing of all volumes of § 101(i)(3) truck imports for the reporting period. Agree the total volume of § 101(i)(3) truck imports from the listing to the inventory reconciliation analysis under § 80.132.

(2) Obtain a listing of all § 101(i)(3) truck import batches reported to EPA by the importer. Agree the total volume of § 101(i)(3) truck imports from the listing to the volume of § 101(i)(3) truck imports reported to EPA. Also, agree these totals to the Import Summary received from the U.S. Customs Service.

(3) Select a sample, in accordance with the guidelines in § 80.127, from the listing obtained in paragraph (b)(2) of this section, and for each § 101(i)(3) truck import batch selected perform the following:

(i) Obtain the copy of the terminal test results for the batch, under § 80.101(i)(3)(iii)(A), and determine that the sample was analyzed using the test methods specified in § 80.46, and agree the terminal test results to the batch properties reported to EPA; and

(ii) Obtain tank activity records for the terminal storage tank showing receipts, discharges, and sampling, and determine that the sample under paragraph (b)(3)(i) of this

section was collected subsequent to the most recent receipt into the storage tank.

(4) Obtain listings for each terminal where § 101(i)(3) truck import gasoline was loaded, of all quality assurance samples collected by the importer, and for each terminal select a sample in accordance with the guidelines in § 80.127 from the listing. For each quality assurance sample selected perform the following:

(i) Determine that the sample was analyzed by the importer or by an independent laboratory, and that the analysis was performed using the test methods specified in § 80.46;

(ii) Obtain the terminal's test results that correspond in time to the time the quality assurance sample was collected, and agree the terminal's test results with the quality assurance test results; and

(iii) Determine that the quality assurance sample was collected within the frequency specified in § 80.101(i)(3)(iv)(D).

(c) Attest procedures for previously certified gasoline. The following procedures are to be carried out in the case of a refiner who uses previously certified gasoline (PCG) under the requirements of § 80.65(i).

(1) Obtain a listing of all batches of PCG received at the refinery during the reporting period. Agree the total

volume of PCG from the listing to the inventory reconciliation analysis under § 80.132.

(2) Obtain a listing of all PCG batches reported to EPA by the refiner. Agree the total volume of PCG from the listing of PCG received to the volume of PCG reported to EPA.

(3) Select a sample, in accordance with the guidelines in § 80.127, from the listing obtained in paragraph (c)(2) of this section, and for each PCG batch selected perform the following:

(i) Trace the PCG batch to the tank activity records. Confirm that the PCG was included in a batch of reformulated or conventional gasoline produced at the refinery.

(ii) Obtain the refiner's laboratory analysis and volume measurement for the PCG when received and agree the properties and volume listed in the corresponding batch report submitted to the EPA, to the laboratory analysis and volume measurements.

(iii) Obtain the product transfer documents for the PCG when received and agree the designations from the product transfer documents to designations in the corresponding batch report submitted to EPA (reformulated gasoline, RBOB or conventional gasoline, and designations regarding VOC control and OPRG).

(d) Attest procedures for butane blenders. The following procedures shall be carried out by a refiner who blends butane under § 80.101(i)(4).

(1) Obtain a listing of all butane batches received at the refinery during the reporting period.

(2) Obtain a listing of all butane batches reported to EPA by the refiner for the reporting period. Agree the total volume of butane from the receipt listing to the volume of butane reported to EPA.

(3) Select a sample, in accordance with the guidelines in § 80.127, from the listing of butane batches reported to EPA, and for each butane batch selected perform the following:

(i) Trace the butane included in the batch to the documents provided to the refiner by the butane supplier for the butane. Determine, and report as a finding, whether these documents establish the butane was commercial grade, non-commercial grade, or neither commercial nor non-commercial grade as defined in § 80.101(i)(4).

(ii) In the case of non-commercial grade butane, obtain the refiner's sampling and testing results for butane, and confirm that the frequency of the sampling and testing was consistent with the requirements in § 80.101(i)(4).

41. Section 80.132 is added to subpart F to read as follows:

§ 80.132 Agreed upon procedures for refiners with in-line blending waivers from independent sampling and testing.

The following are the procedures to be carried out at each refinery where reformulated gasoline or RBOB is produced under an exemption from independent sampling and testing obtained under § 80.65(f)(2) (an "in-line blending exemption").

(a) Review waiver requirements.

(1) review the refiner's petition submitted under § 80.65(f)(2), and of EPA's approval of this petition.

(2) Note, and report as a finding, for each parameter specified in § 80.65(e)(2)(i), and for each form of sampling and/or testing to be carried out under the terms of in-line blending exemption petition and/or under EPA's petition approval:

(i) The location where the sample is to be collected;

(ii) The manner in which the sample is to be collected;

(iii) The number of samples to be collected during each separate blend;

(iv) How the refiner is to determine the time when each sample is collected;

(v) Who is to collect the sample;



- (vi) The type of analysis to be performed;
- (vii) Where the analysis is to be performed;
- (viii) Who is to perform the analysis; and
- (ix) The manner in which the analysis results are to be recorded and reported.

(b) Batch listings.

(1) Obtain a listing of all batches of reformulated gasoline and RBOB produced during the prior year under an in-line blending exemption, and test the mathematical accuracy of the volumetric calculations contained in the listing.

(2) Select a representative sample of the reformulated gasoline and RBOB batches produced under an in-line blending exemption using the guidelines specified under § 80.127, and for each batch selected obtain the laboratory analysis results for the batch, as identified in paragraph (a)(2) of this section.

(3) The procedures specified in paragraphs (c) and (d) of this section shall be carried out for each batch identified in paragraph (b)(2) of this section, and for each parameter that is subject to, or that is used to calculate an emissions performance that is subject to, a standard specified in § 80.41 for the batch.

(c) Primary analysis results.

(1) Identify the laboratory analysis that formed the basis for the refiner's report to EPA for the parameter (the "primary analysis") and report this result as a finding;

(2) Agree the primary analysis to the refiner's report to EPA; and

(3) Confirm that the sample was collected, analyzed, and reported as specified under paragraph (a)(2) of this section.

(d) Confirmatory analysis. Identify the laboratory analysis results that, under the terms of the in-line blending exemption petition, are to be used to confirm the accuracy of the primary analysis (the "confirmatory analysis"), and for each parameter complete the procedures specified in this paragraph (d).

(1) Where the confirmatory analysis results are from an analyzer that operates continually or with great frequency as part of the in-line blending operation ("on-line" analysis results), identify twelve confirmatory analysis results as follows:

(i) Separate the blend into twelve equal time segments;

(ii) For each time segment, identify the mid-point of the time segment; and

(iii) Identify the on-line analysis result that reflects the quality of gasoline being produced most close to the mid-point of the time segment.

(2) Where the confirmatory analysis results are from samples that are collected during the blending operation and analyzed at a separate laboratory ("off-line" analysis results), select a representative sample of the off-line confirmatory analysis results using the guidelines specified in § 80.127 as confirmatory analysis results.

(3) Where the confirmatory analysis results are from samples of blendstocks used in the in-line blending operation:

(i) Identify the analysis result that reflects the properties, and proportions, of each blendstock being used at the times identified in paragraph (d)(1) of this section; and

(ii) Calculate the expected parameter value for the gasoline or RBOB based on the blendstock proportions and property values at each time as twelve confirmatory analysis results.

(4) For any confirmatory analysis result identified under paragraphs (d)(1) through (3) of this section:

(i) Agree the confirmatory analysis result with:

(A) The primary analysis result; and

(B) The applicable per-gallon standard for the parameter;

(ii) Confirm that the confirmatory sample was collected, analyzed, and reported as specified under paragraph (a)(2) of this section; and

(iii) Report the confirmatory analysis result as a finding.

(e) Expansion of sample. If for any batch selected under paragraph (b)(2) of this section the difference between any primary analysis result and the corresponding confirmatory analysis result under paragraph (d) of this section is greater than the value for that parameter specified in § 80.65(e)(2)(i), the following procedure shall be followed:

(1) Select an additional sample from the listing of batches under paragraph (b)(1) of this section using the guidelines specified under § 80.127 based on the total number of batches, but in a manner that randomly selects only from batches that were not selected under paragraph (b)(2) of this section; and

(2) Complete the procedures specified in paragraphs (c) and (d) of this section for each batch selected, and for each parameter that is subject to, or that is used to calculate an emissions performance that is subject to, a standard specified in § 80.41 for the batch.

42. Section 80.133 is added to subpart F to read as follows:

§ 80.133 Agreed-upon procedures for refiners and importers.

The following are the minimum attest procedures that shall be carried out for each refinery and importer. Agreed upon procedures may vary from the procedures stated in this section due to the nature of the refiner's or importer's business or records, provided that any refiner or importer desiring to use modified procedures obtains prior approval from EPA.

(a) EPA Reports.

(1) Obtain and read a copy of the refinery's or importer's reports (except for batch reports) filed with the EPA as required by §§ 80.75 and 80.105 for the reporting period.

(2) In the case of a refiner's report to EPA that represents aggregate calculations for more than one refinery, obtain the refinery-specific volume and property information that was used by the refiner to prepare the aggregate report. Foot and crossfoot the refinery-specific totals and agree to the values in the aggregate report. The procedures in paragraphs (b) through (m) of this section then are performed separately for each refinery.

(3) Obtain a written representation from a company representative that the report copies are complete and accurate copies of the reports filed with the EPA.

(4) Identify, and report as a finding, the name of the commercial computer program used by the refiner or importer to track the data required by these regulations, if any.

(b) Inventory reconciliation analysis. Obtain an inventory reconciliation analysis for the refinery or importer for the reporting period by product type (i.e., reformulated gasoline, RBOB, conventional gasoline, and non-finished-gasoline petroleum products), and perform the following:

(1) Foot and crossfoot the volume totals reflected in the analysis; and

(2) Agree the beginning and ending inventory amounts in the analysis to the refinery's or importer's inventory records. If the analysis shows no production of conventional gasoline or if the refinery or importer represents under paragraph (1) of this section that it has a baseline less stringent or equal to the statutory baseline, the analysis may exclude non-finished-gasoline petroleum products.

(3) Report as a finding the volume totals for each product type.

(c) Listing of tenders. For each product type other than non-finished gasoline petroleum products (i.e., reformulated gasoline, RBOB, conventional gasoline), obtain a separate listing of all tenders from the refinery or importer for the reporting period. Each listing should provide for each tender the volume shipped and other information as needed to distinguish tenders. Perform the following:

- (1) Foot to the volume totals per the listings; and
- (2) For each product type listed in the inventory reconciliation analysis obtained in paragraph (b) of this section, agree the volume total on the listing to the tender volume total in the inventory reconciliation analysis.

(d) Listing of batches. For each product type other than non-finished gasoline petroleum products (i.e., reformulated gasoline, RBOB, and conventional gasoline), obtain separate listings of all batches reported to the EPA and perform the following:

- (1) Foot to the volume totals per the listings; and
- (2) Agree the total volumes in the listings to the production volume in the inventory reconciliation analysis obtained in paragraph (b) of this section.

(e) Reformulated gasoline tenders. Select a sample, in accordance with the guidelines in § 80.127, from the listing of reformulated gasoline tenders obtained in

paragraph (c) of this section, and for each tender selected perform the following:

(1) Obtain product transfer documents associated with the tender and agree the volume on the tender listing to the volume on the Product transfer documents; and

(2) Note whether the product transfer documents evidencing the date and location of the tender and the compliance model designations for the tender (VOC-controlled for Region 1 or 2, non VOC-controlled, and simple or complex model certified).

(f) Reformulated gasoline batches. Select a sample, in accordance with the guidelines in § 80.127, from the listing of reformulated gasoline batches obtained in paragraph (d) of this section, and for each batch selected perform the following:

(1) Agree the volume shown on the listing, to the volume listed in the corresponding batch report submitted to EPA; and

(2) Obtain the refinery's or importer's laboratory analysis and agree the properties listed in the corresponding batch report submitted to EPA, to the properties listed in the laboratory analysis.

(g) RBOB tenders. Select a sample, in accordance with the guidelines § 80.127, from the listing of RBOB tenders



obtained in paragraph (c) of this section, and for each tender selected perform the following:

(1) Obtain product transfer documents associated with the tender and agree the volume on the tender listing to the volume on the product transfer documents; and

(2) Inspect the product transfer documents evidencing the type and amount of oxygenate to be added to the RBOB.

(h) RBOB batches. Select a sample, in accordance with the guidelines in § 80.127, from the listing of RBOB batches obtained in paragraph (d) of this section, and for each batch selected perform the following:

(1) Obtain from the refiner or importer the oxygenate type and volume, and oxygen volume required to be hand blended with the RBOB, in accordance with §§ 80.69(a)(2) and (8);

(2) Agree the volume shown on the listing, as adjusted to reflect the oxygenate volume determined under paragraph (h)(1) of this section, to the volume listed in the corresponding batch report submitted to EPA; and

(3) Obtain the refinery's or importer's laboratory analysis of the RBOB hand blend and agree:

(i) The oxygenate type and oxygen amount determined under paragraph (h)(1) of this section, to the tested oxygenate type and oxygen amount listed in the laboratory analysis; and

(ii) The properties listed in the corresponding batch report submitted to EPA to the properties listed in the laboratory analysis.

(4)(i) Categorize the RBOB batch reports into two groups:

(A) RBOB Batch reports showing:

(1) "RBOB-any oxygenate" with ethanol as oxygenate and an oxygen content of 2.0 weight percent; and

(2) "RBOB-ethers only" with only MTBE as oxygenate and an oxygen content of 2.0 weight percent; and

(B) All other RBOB batch reports.

(ii) Perform the following procedures for each batch report included in paragraph (h)(4)(i)(B) of this section:

(A) Obtain and inspect a copy of the executed contract with the downstream oxygenate blender (or with an intermediate owner), and confirm that the contract:

(1) Was in effect at the time of the corresponding RBOB transfer; and

(2) Allowed the company to sample and test the reformulated gasoline made by the blender.

(B) Obtain a listing of RBOB blended by downstream oxygenate blenders and the refinery's or importer's oversight test results, and select a representative sample, in accordance with the guidelines in § 80.127, from the

listing of test results and for each test selected perform the following:

(1) Obtain the laboratory analysis for the batch, and agree the type of oxygenate used and the oxygen content appearing in the laboratory analysis to the instructions stated on the product transfer documents corresponding to a RBOB receipt immediately preceding the laboratory analysis and used in producing the reformulated gasoline batch selected;

(2) Calculate the frequency of sampling and testing or the volume blended between the test selected and the next test; and

(3) Agree the frequency of sampling and testing or the volume blended between the test selected and the next test to the sampling and testing frequency rates stated in § 80.69(a)(7).

(i) Conventional gasoline and conventional gasoline blendstock tenders. Select a sample, in accordance with the guidelines in § 80.127, from the listing of the tenders of conventional gasoline and conventional gasoline blendstock that becomes gasoline through the addition of oxygenate only, and for each tender selected perform the following:

(1) Obtain product transfer documents associated with the tender and agree the volume on the tender listing to the volume on the product transfer documents; and

(2) Inspect the product transfer documents evidencing that the information required in § 80.106(a)(1)(vii) is included.

(j) Conventional gasoline batches. Select a sample, in accordance with the guidelines in § 80.127, from the conventional gasoline batch listing obtained in paragraph (d) of this section, and for each batch selected perform the following:

(1) Agree the volume shown on the listing, to the volume listed in the corresponding batch report submitted to EPA; and

(2) Obtain the refinery's or importer's laboratory analysis and agree the properties listed in the corresponding batch report submitted to EPA, to the properties listed in the laboratory analysis.

(k) Conventional gasoline oxygenate blending. Obtain a listing of each downstream oxygenate blending facility and its blender, as represented by the refiner/importer, as adding oxygenate used in the compliance calculations for the refinery or importer, or a written representation from the refiner for the refinery or importer that it has not used any downstream oxygenate blending in its conventional gasoline compliance calculations.

(1) For each downstream oxygenate blender facility, obtain a listing from the refiner or importer of the batches

of oxygenate included in its compliance calculations added by the downstream oxygenate blender and foot to the total volume of batches per the listing;

(2) Obtain a listing from the downstream oxygenate blender of the oxygenate blended with conventional gasoline or sub-octane blendstock that was produced or imported by the refinery or importer and perform the following:

(i) Foot to the total volume of the oxygenate batches per the listing; and

(ii) Agree the total volumes in the listing obtained from the downstream oxygenate blender, to the listing obtained from the refiner or importer in paragraph (k)(1) of this section.

(3) Where the downstream oxygenate blender is a person other than the refiner or importer, as represented by management of the refinery or importer, perform the following:

(i) Obtain the contract from the refiner or importer with the downstream blender and inspect the contract evidencing that it covered the period when oxygenate was blended;

(ii) Obtain company documents evidencing that the refiner or importer has records reflecting that it conducted physical inspections of the downstream blending operation during the period oxygenate was blended;

(iii) Obtain company documents reflecting the refiner or importer audit over the downstream oxygenate blending operation and note whether these records evidencing the audit included a review of the overall volumes and type of oxygenate purchased and used by the oxygenate blender to be consistent with the oxygenate claimed by the refiner or importer, and that this oxygenate was blended with the refinery's or importer's gasoline or blending stock; and

(iv) Obtain a listing of test results for the sampling and testing conducted by the refiner or importer over the downstream oxygenate blending operation, and select a sample, in accordance with the guidelines in § 80.127, from this listing. For each test selected, agree the tested oxygenate volume with the oxygenate volume in the listing obtained from the oxygenate blender in paragraph (k)(2) of this section for this gasoline.

(1) Blendstock tracking.

(1) Either:

(i) Obtain a written representation from management of the refinery or importer that it has a baseline for each property that is less stringent or equal to the statutory baseline and as a result is exempt from blendstock tracking under § 80.102(f)(1)(i); or

(ii) Perform the following procedures.

(2) Obtain listings for those tenders of non-finished-gasoline petroleum products classified by the refiner or importer as:

(i) Applicable blendstock that is included in the refinery's or importer's blendstock tracking calculations pursuant to §§ 80.102(b) through (d);

(ii) Applicable blendstock that is exempt pursuant to § 80.102(d)(3) from inclusion in the refinery's or importer's blendstock tracking calculations pursuant to §§ 80.102(b) through (d); and

(iii) All other non-finished-gasoline petroleum products;

(3) Foot to the totals of the tender volumes contained in the listings obtained from the refinery or importer in paragraph (1)(2) of this section;

(4) Agree the total volume of tenders per the listings to the total tender volume of non-finished-gasoline products on the gasoline inventory reconciliation analysis obtained in paragraph (b) of this section; and

(5) Compute and report as a finding the refinery's or importer's ratio of all non-finished petroleum products to total gasoline production. Total gasoline production is the volume total of the batches from paragraph (d) of this section for reformulated gasoline, RBOB, and conventional gasoline, exclusive of California gasoline.

(6) No procedures must be performed under paragraph (1)(7) through (18) of this section if:

(i) The ratio in paragraph (1)(5) of this section is less than or equal to 3%; and

(ii) The refiner represents in writing that blendstock accounting is not required under § 80.102(g).

(7) Select a sample, in accordance with the guidelines in § 80.127, from the tender listing obtained in paragraph (1)(2)(ii), and for each tender selected perform the following:

(i) Obtain the refinery's or importer's company documents that evidence the transfer of the product to another party and agree the volumes contained in these records to the listing of tenders; and

(ii) Obtain documents from the refinery or importer that support the exclusion of the applicable blendstock from the blendstock-to-gasoline ratio, and agree that the documented purpose is one of those specified at § 80.102(d)(3);

(8) Agree the total tender volume obtained in paragraph (1)(2)(ii) to the "total volume of applicable blendstock produced or imported, transferred to others and excluded from blendstock ratio calculations" reported to EPA, or to the refinery-specific volume under paragraph



(a)(2) of this section used to prepare an aggregate report submitted to EPA.

(9) Compute and report as a finding the refinery's ratio of applicable blendstocks included in the tracking calculation under paragraph (1)(2)(i) of this section plus all other non-finished-gasoline petroleum products under paragraph (1)(2)(iii) of this section, to total gasoline production. Total gasoline production is the volume total of the batches from paragraph (d) of this section for reformulated gasoline, RBOB, oxygenates blended downstream of the refinery or import facility, and conventional gasoline, exclusive of California gasoline.

(10) No procedures must be performed under paragraphs (1)(11) through (18) of this section if :

(i) The ratio in paragraph (1)(9) of this section is less than or equal to 3%;

(ii) No exceptions were noted in paragraph (1)(7); and

(iii) The refiner represents in writing that blendstock accounting is not required under § 80.102(g).

(11) Select a sample, in accordance with the guidelines in § 80.127, from the listing obtained in paragraph (1)(2)(iii) of this section, and for each tender selected perform the following:

(i) Obtain the records that evidence the transfer of the product to another party and agree the volume contained

in these records to the volume on the listing of tenders;  
and

(ii) Inspect the product type assigned by the refiner or importer on the transfer document (i.e., alkylate, raffinate, etc.) and agree that this product type is not included in the applicable blendstock list at § 80.102(a).

(12) Agree the total tender volume obtained in paragraph (1)(2)(i) to the "total volume of applicable blendstock produced or imported, transferred to others and included in blendstock ratio calculations" reported to EPA, or to the refinery-specific volume under paragraph (a)(2) of this section used to prepare an aggregate report submitted to EPA.

(13) Compute and report as a finding the refinery's ratio of applicable blendstocks included in the tracking calculation under paragraph (1)(1)(i) of this section to total gasoline production. Total gasoline production is the volume total of the batches from paragraph (d) of this section for reformulated gasoline, RBOB, oxygenate blended downstream of the refinery or import facility, and conventional gasoline, exclusive of California gasoline.

(14) No procedures must be performed under paragraphs (1)(15) through (18) if:

(i) The ratio in paragraph (1)(13) of this section is less than or equal to 3%; and

(ii) The refiner represents in writing that blendstock accounting is not required under § 80.102(g).

(15) Obtain the refinery's or importer's blendstock-to-gasoline ratios for calendar years 1990 through 1993.

(16)(i) In the case of averaging periods prior to 1998, compute and report as a finding the peak year blendstock-to-gasoline ratio percentage change as required under § 102(d)(1)(ii); or

(ii) In the case of averaging periods beginning in 1998, compute and report as a finding the running cumulative compliance period blendstock-to-gasoline ratio as required under § 80.102(d)(2)(i), and the cumulative blendstock-to-gasoline ratio percentage change as required under § 80.102(d)(2)(ii).

(17) Obtain from the refiner or importer the prior year's peak year blendstock-to-gasoline ratio percentage change if the prior year was prior to 1998, or running cumulative compliance period blendstock-to-gasoline ratio if the prior year was 1998 or later.

(18) No procedures must be performed under paragraph (m) of this section if:

(i) For the prior year the peak year blendstock-to-gasoline ratio percentage change (for 1995 through 1997), or the cumulative blendstock-to-gasoline ratio percentage change (for 1998 and after), is less than ten; and

(ii) The refiner represents in writing that blendstock accounting is not required under § 80.102(g).

(m) Blendstock accounting.

(1) Obtain listings for those tenders of non-finished-gasoline petroleum products tenders classified by the refinery or importer as:

(i) Blendstock that is included in the compliance calculations for the refinery or importer under § 80.102(e)(2)(i); and

(ii) All other non-finished-gasoline petroleum products;

(2) Foot the total volume of tenders per the listings;

(3) Agree the total volume of tenders per the listings to the gasoline inventory reconciliation analysis obtained in paragraph (b) of this section;

(4) Select a sample, in accordance with the guidelines in § 80.127, from the listing of blendstock tenders that are included in the compliance calculations for the refinery or importer, and for each tender selected perform the following:

(i) Agree the volumes to company documents evidencing the transfer of the tender to another party;

(ii) Note the product transfer documents includes the statement indicating the blendstock has been accounted-for,

and may not be included in another party's compliance calculations; and

(5) Agree the total tender volume obtained in paragraph (m)(1)(i) of this section to the "total volume of blendstocks included in compliance calculations" reported to EPA, or to the refinery-specific volume under paragraph (a)(2) of this section used to prepare an aggregate report submitted to EPA.

(6) Select a sample, in accordance with the guidelines in § 80.127, from the listing of tenders of non-finished-gasoline petroleum products that are excluded from the refinery's or importer's compliance calculations, and for each tender selected confirm that company documents demonstrate that the petroleum products were used for a purpose other than the production of gasoline within the United States.

43. Section 80.134 is added to subpart F to read as follows:

§ 80.134 Agreed-upon procedures for downstream oxygenate blenders.

The following are the minimum attest procedures that shall be carried out for each oxygenate blending facility that is subject to the requirements of this subpart F. Agreed upon procedures may vary from the procedures stated

in this section due to the nature of the oxygenate blender's business or records, provided that any oxygenate blender desiring to use modified procedures obtains prior approval from EPA.

(a) EPA Blender Reports. Obtain and read a copy of the blender's reports filed with the EPA as required by § 80.75 for the reporting period. Obtain a written representation from a company representative that the copies are complete and accurate copies of the reports filed with the EPA.

(b) Inventory reconciliation analysis.

(1) Obtain from the blender an inventory reconciliation analysis for the reporting period that summarizes:

(i) Receipts of RBOB, reformulated gasoline, and oxygenate;

(ii) Beginning and ending inventories of RBOB , reformulated gasoline, and oxygenate;

(iii) Production of reformulated gasoline; and

(iv) Tenders of RBOB and reformulated gasoline.

(2) Foot and the crossfoot volume totals reflected in the analysis.

(3) Agree the beginning and ending inventory amounts in the analysis to the blender's inventory records.

(c) RBOB receipts. Obtain a listing of all RBOB receipts for the reporting period, and perform the following:

(1) Foot to the total volume of RBOB receipts per the listing;

(2) Agree the total RBOB receipts volume reflected on the listing to the RBOB receipts volume on the inventory reconciliation analysis;

(3) Select a sample, in accordance with the guidelines in § 80.127, of RBOB receipts from the listing. For each selected RBOB receipt, obtain product transfer documents specifying the type and volume of oxygenate to be added to the RBOB.

(d) Oxygenate receipts. Obtain a listing of all oxygenate receipts for the reporting period, and perform the following:

(1) Foot to the total volume of oxygenate receipts per the listing;

(2) Agree the total oxygenate receipts volume reflected on the listing to the oxygenate receipts volume on the inventory reconciliation analysis.

(e) Reformulated gasoline Tenders. Obtain a listing of all reformulated gasoline tenders for the reporting period, and perform the following:

(1) Foot to the total reformulated gasoline tenders per the listing;

(2) Agree the total reformulated gasoline tenders volume reflected on the listing to the reformulated gasoline tenders volume on the inventory reconciliation analysis;

(3) Select a sample, in accordance with the guidelines in § 80.127, of reformulated gasoline tenders from the listing, and for each tender selected perform the following:

(i) Obtain the product transfer documents associated with the tender and agree the volume on the tender listing to the volume on the product transfer documents.

(ii) Inspect the product transfer documents evidencing the date and location of the tender and the compliance model designations for the tender (VOC-controlled for Region 1 or 2, non VOC-controlled, and simple or complex model certified).

(f) RBOB tenders. Obtain a listing of all RBOB tenders during the reporting period, and perform the following:

(1) Foot to the total volume of RBOB per the listing;

(2) Agree the total RBOB tenders volume reflected on the listing to the RBOB tenders volume on the inventory reconciliation analysis.

(g) Reformulated gasoline batches. Obtain a listing of all reformulated gasoline batches produced during the reporting period, and perform the following:



(1) Foot to the total volume of reformulated gasoline batches produced per the listing;

(2) Agree the total reformulated gasoline batch volume reflected on the listing to the reformulated gasoline batch volume on the inventory reconciliation analysis.

(h) Blender sampling and testing.

(1) For blenders who meet the oxygenate blending requirements by sampling and testing each batch of reformulated gasoline, select a sample, in accordance with the guidelines in § 80.127, of reformulated gasoline batches from the listing obtained in paragraph (9) of this section, and for each batch selected perform the following:

(i) Obtain the internal laboratory analysis for the batch, and agree the type of oxygenate used and the oxygen content appearing in the laboratory analysis to the instructions stated on the product transfer documents corresponding to a RBOB receipt immediately preceding the laboratory analysis and used in producing the reformulated gasoline batch selected.

(ii) Agree the oxygen content results of the laboratory analysis to the corresponding batch information reported to EPA.

(2) For blenders who meet the oxygen content standard on average without separately sampling and testing each

batch, under the terms of § 80.69(b)(5), the following procedures shall be carried out:

(i) Obtain a listing of the oxygen compliance calculations, test the mathematic accuracy of the listing, and agree the volumetric calculations to the material balance analysis.

(ii) Select a representative sample of the oxygen compliance calculations using the guidelines in § 80.127, and for each calculation selected:

(A) Confirm that the calculation represented gasoline production for a period no longer than one month;

(B) Confirm that the oxygenate blender properly performed the calculation required in § 80.69(b)(5), including that the oxygenate blender used the proper values for specific gravities, mole fraction, and denaturant content; and

(C) Agree the calculated oxygen value to the corresponding batch report to EPA.

(iii) Obtain records of the oxygenate blender's quality assurance program of sampling and testing as required in § 80.69(b)(5), select a representative sample of the quality assurance sample selected using the guidelines in § 80.127, and for each quality assurance sample selected confirm the sample was collected within the required frequency.

44. Appendices A through G to Part 80 are removed.